

THE RELATIONSHIP OF FORMAL RELIGIOUS EDUCATION  
TO THE MORAL JUDGMENT DEVELOPMENT OF COLLEGE STUDENTS

By

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A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL  
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1991

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by

Gary Gene Friend

This dissertation is dedicated to Weston Webster and Virginia Eloise Friend, who loved me, nurtured me, and taught me the ethical and religious values which have been the mainstay of my life; and to my wife, Jacquelyn, and my children, Gary, Matthew, and Jennifer, who have been the proving ground for those teachings. Without the love, instruction, and example of two genuinely loving Christian parents, the richness of my life would be far less than what it is. Without the love and patience of my wife and children, my ethical and religious values would not have been tempered, purified, and refined; and the depth of my character would be far less than what it is.

## ACKNOWLEDGMENTS

I would like to thank my wife, Jacquelyn, who has supported me during all of my programs of study in numerous colleges and universities throughout the United States. Without her love, friendship, and assistance I would not have endured.

I also would like to thank my supervisory committee, James Wattenbarger, Joan Curcio, James Hensel, and M. David Miller, whose assistance in shaping and honing the concept of this investigation was invaluable to me. In addition, I would like to thank Patricia Ashton for the advice she provided concerning the literature review.

Finally, I would like to thank the presidents, faculty, and students of the participating institutions. Without their full cooperation, this study would not have been possible.

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Abstract of Dissertation Presented to the Graduate School  
of the University of Florida in Partial Fulfillment of the  
Requirements for the Degree of Doctor of Philosophy

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MAY 1991

Chairman: James L. Wattenbarger

Major Department: Educational Leadership

The purpose of this study was to determine if there is a significant relationship between formal religious education and the moral judgment development of college students, and, after controlling for formal religious education, to see if there is also a significant relationship between the educational environment or certain selected student characteristics and the moral judgment development of those students. Formal religious education was defined as the study of Judeo-Christian philosophy, theology, or ethics at a fully accredited college or divinity school. Educational environment was defined as

the type of school attended and the Judeo-Christian denominational affiliation of the school.

A correlational design was used, and data were gathered through two instruments: a one-page demographics, educational background, religious ideology, and moral values background questionnaire designed by the researcher; and the Defining Issues Test (DIT) designed by James Rest. DIT P scores were used as the measure of moral development. The final data base contained 226 randomly selected college and divinity school students, enrolled at 12 fully accredited, randomly selected institutions from 11 states located throughout the United States.

The number of ethics courses completed was related significantly to the moral judgment development of liberal arts college students; however, this relationship was not significant for divinity school students. Judeo-Christian philosophy or theology courses completed were not related significantly to student moral development.

After controlling for ethics courses completed, the type of school attended, the affiliation of some institutions, and 8 of 15 selected student characteristics

were related significantly to the moral judgment development of students. Divinity school students had significantly higher levels of moral development than liberal arts college students. Students attending Roman Catholic and Southern Baptist institutions had significantly lower levels of moral development than students attending nonaffiliated institutions. Conversely, the moral development of students attending Jewish and United Methodist institutions did not differ significantly from the moral development of students attending nonaffiliated institutions. The eight significantly related student characteristics were gender, ethnic group, highest degree held, year of study, mother's education level, father's education level, religious ideology regarding moral decisions, and individual denominational membership.

## CHAPTER 1 INTRODUCTION

### Background

Although the early founders of American colleges were concerned about the moral development of students, the required courses in moral philosophy that directly addressed that concern disappeared from college curricula in the early twentieth century (Rudolph, 1962, 1977). There has been a recent resurgence of support for reintroducing ethics courses into American college curricula, in nearly all academic disciplines (Baca & Stein, 1983). This renewed support has been strengthened by the perception of a pervasive deterioration of ethical values and standards in all areas of American life. This perception of widespread moral deterioration has been reinforced by recent scandals in athletics, business, education, government, medicine, and religion. These scandals also have raised profound questions concerning the basic ethical fabric of modern

American society (Barrett, 1987; Bowen, 1987; Koepp, 1987; Shapiro, 1987; Stengel, 1987).

Is there a universal ethical standard for human behavior? From the earliest time there has been sharp disagreement on the answer to this question. Plato (c.350/1937) postulated that there was a transcendent universal standard of justice, and that it was from this standard that human applications were derived. George E. Moore (1903) postulated that there was no universal standard, that moral laws were simply statements that certain types of actions would have good effects, that the end always would justify the means, and that no action that was not justified by its results could be right.

This disagreement over the existence of a universal ethical standard has not been settled. Nevertheless, each person ultimately develops a standard for individual ethical conduct. To believe there is no universal standard means individual ethical conduct adheres to an individually determined standard of ethics; on the other hand, to believe there is a universal standard still means the application of that standard is individually determined, and once again

individual ethical conduct adheres to an individually determined standard of ethics. Either way there is an ethical standard that is followed. If that standard is adhered to by most human beings in a society, it becomes, at the very least, a universal standard for that society.

For the Judeo-Christian society, the universal standard is behavior rooted in the golden rule. The ethical norms for most Judeo-Christian denominations are prescribed by two basic biblical principles. These principles are: (a) "Hear, O Israel, the Lord Our God is One Lord, and you shall Love the Lord your God with all your heart, and with all your soul, and with all your strength" (Snaith, 1978, p.287); and (b) "You shall love your neighbor as yourself" (Snaith, 1978, p. 187). These principles set the standard for Judeo-Christian living and are interpreted into an individual concept of morality and justice using examples such as Moses and Jesus Christ as the hermeneutic for that interpretation, and the golden rule as the instruction for application. In the final analysis, however, the moral belief of individuals can be determined only by their feelings concerning how they ought to treat others, and how

others ought to treat them, not by what they do, because belief does not always result in practice (Aland, Black, Martini, Metzger & Wikgren, 1975; Rest, 1986b).

### Need for the Study

Can moral judgment be developed? There has been a voluminous amount of research done in the field of moral development. Some of the most notable research has been done by Lawrence Kohlberg at Harvard University and by James Rest at the University of Minnesota Center for the Study of Ethical Development. Both Kohlberg and Rest concluded from their research that moral judgment can be developed, and that this development continues well into adulthood (Colby et al., 1983; Rest, 1979, 1986b). In addition, Rest (1986b) concluded that people can show dramatic changes in moral development in their twenties, and that college education is powerfully associated with the development of moral judgment. Rest (1986a, 1986b) also concluded that differences between males and females with regard to moral development are trivial, and that individual religious ideology, characterized on a conservative to liberal

dimension, does account for significant variance in measurements of moral judgment development.

If moral judgment can be developed, how can a society properly influence individual moral belief in a way that will result in adherence to a socially acceptable ethical standard, and that eventually will result in socially acceptable individual behavior? It has been in the area of the development of moral belief that some individuals have indicated that formal religious education has a definite role to play. Conversely, there are others who have indicated that formal religious education has no definite role to play in that area. This continuing controversy can be seen in the literature of James Michael Lee and Lawrence Kohlberg. Lee (1980) indicated that because virtually every Christian denomination affirms that morality is an integral part of its doctrine and practice, moral development is also a vital part of the religious education activities that each supports. He pointed out that "Kohlberg operationally defines religion as religious affiliation. Thus his data do not show that morality is autonomous from religion, but rather from religious



affiliation" (p. 333). Lee concluded that formal religious education has a unique role to play in moral development. In contrast, Kohlberg (1981) stated that "formal religious education has no specifically important or unique role to play in moral development" (p 304).

Moreover, Rest (1986b) indicated that, although there have been numerous studies that contribute to the conclusion that higher education has a positive effect on the moral judgment development of college students, there has been very little research that has investigated the relationship of formal religious education to the moral judgment development of college students. As a result of that lack of research, he felt little was known concerning the effects of religious education on moral judgment development at the college level. He pointed out that most researchers who had investigated the relationship of religious education to moral judgment development drew their samples from high school students and noncollege affiliated adults. He also said there had been no research done at the college level that investigated the relationship of formal religious education to moral judgment development, and also

examined the relationship of educational environment and selected student characteristics to moral judgment development. Consequently, he concluded that our knowledge of whether formal religious education influences moral judgment development will remain limited until studies are conducted that do incorporate all of those variables.

The controversy, as seen in the literature of Lee (1980) and Kohlberg (1967, 1981), over whether formal religious education has a uniquely significant role to play in moral development, has not been adequately clarified by definitive research. Furthermore, Rest (1986b) indicated that the literature relating religious measures to moral judgment development shows an inconsistent relationship between P scores on the Defining Issues Test (DIT) and religious education. More research is needed in order to address this controversy and definitively determine if there is a significant relationship between formal religious education and moral judgment development. If it can be determined that formal religious education does have a significant role to play in moral judgment development, then the question of how much and what type of formal religious

education is most effective in developing moral judgment can be addressed.

The controversy over the significance of the role of formal religious education in moral development and the lack of research concerning the relationship of formal religious education to moral judgment development were the primary reasons this study was needed. These two reasons also provided the main impetus for this investigation.

#### Assumptions

It was assumed, for the purposes of this study, that there is a universal ethical standard that sets forth the proper way for human beings to relate to one another with regard to such things as truth and justice (Kohlberg, 1981; Nisan & Kohlberg, 1982, Piaget, 1932/1965; Plato c.350/1937; Rest, 1986b). Second, it was assumed that each individual is capable of formulating and living ethical values that are oriented toward increasingly higher stages of moral development, as defined by Kohlberg, and that the movement to those higher stages continues throughout life (Colby, Kohlberg, Gibbs & Lieberman, 1983; Piaget,

1932/1965; Rest, Davison & Robbins, 1978; Rest, 1979, 1986b). Third, it was assumed that individuals in their college years are highly receptive to moral judgment development (Biggs & Barnett, 1981; Colby et al., 1983; Rest, 1986a, 1986b). Finally, it was assumed that moral judgment development can be measured in a manner that is quantifiable (Davison & Robbins, 1978; Kohlberg, 1981, 1983, 1984; Rest 1979, 1986a, 1986b).

#### Statement of Purpose

The purpose of this study was to determine if there is a significant relationship between formal religious education and the moral judgment development of college students, and, after controlling for formal religious education, to see if there is also a significant relationship between the educational environment or certain selected student characteristics and the moral judgment development of those students. In order to accomplish this purpose the researcher examined specific formal religious education courses, different types of higher education institutions with varied religious affiliations, and a

number of selected student characteristics across a wide range of educational environments.

### Research Questions and Hypotheses

The study was divided into three phases, and hypotheses were developed to assist in determining the answers to the research questions examined in each of those phases. The following research questions were posed for this study:

1. Primary research question: Is there a significant relationship between formal religious education and the moral judgment development of college students, based on the number and type of formal religious education courses completed?

2. Secondary research question: After controlling for any significantly related formal religious education courses, is there a significant relationship between the educational environment and the moral judgment development of college students?

3. Tertiary research question: After controlling for any significantly related formal religious education

courses, is there a significant relationship between certain selected student characteristics and the moral judgment development of college students?

During Phase 1 of the investigation, Hypothesis 1 was tested to determine the answer to the primary research question. During Phase 2 of the investigation, Hypotheses 2 and 3 were tested to determine the answer to the secondary research question. During Phase 3 of the investigation, Hypotheses 4 through 8 were tested to determine the answer to the tertiary research question. The following is a listing of the hypotheses used in this study:

1. Hypothesis 1: There is no difference, based on the number and type of formal religious education courses completed, in the DIT P scores of college students.
2. Hypothesis 2: After controlling for ethics courses completed, there is no difference, based on school type, in the DIT P scores of college students.
3. Hypothesis 3: After controlling for ethics courses completed, there is no difference, based on school affiliation, in the DIT P scores of college students attending the same type of school.

4. Hypothesis 4: After controlling for ethics courses completed, there is no difference, based on age, gender, year of study, grade point average, parents' annual income, familiarity with Kohlberg's moral development theory, or individual religious conversion experience, in the DIT P scores of college students.

5. Hypothesis 5: After controlling for ethics courses completed, there is no difference, based on mother's education level, father's education level, or student's religious ideology regarding moral decisions, in the DIT P scores of college students.

6. Hypothesis 6: After controlling for ethics courses completed, there is no difference, based on church/synagogue attendance, in the DIT P scores of college students.

7. Hypothesis 7: After controlling for ethics courses completed, there is no difference, based on ethnic group, highest degree held, or source of basic moral values, in the DIT P scores of college students.

8. Hypothesis 8: After controlling for ethics courses completed, there is no difference, based on individual

denominational membership, in the DIT P scores of college students.

### Delimitations

Two widely accepted measures of moral judgment development are the Moral Maturity Scale (MMS) developed by Kohlberg from his Moral Judgment Interview, and the P Score Index developed by Rest from his Defining Issues Test (DIT) (Rest, 1986b). The DIT P Score was the only measure of moral judgment development used for this study. The Defining Issues Test was selected for use in this study because it is the most widely used measure of moral judgment, it is the best documented in terms of reliability and validity, it can be administered by mail, and it is an objective test that is simple to score (Rest, 1986a).

The colleges and divinity schools used in this study, except for the nonaffiliated ones, were selected because of their connection with the four largest Judeo-Christian denominations in the United States. The nonaffiliated institutions were included mainly for educational environment comparison purposes.



This study was restricted to an evaluation of the moral judgment development of college and divinity school students who were receiving formal religious education that teaches primarily the Judeo-Christian ethic. However, the intent was to examine the full spectrum of that teaching in a number of varied educational environments at higher education institutions located throughout the United States.

#### Limitations

This study included an examination of only Judeo-Christian formal religious education. Although this decision was made by design, it does limit the generalization of the results to other religious and ethical systems.

The denominationally affiliated colleges and divinity schools that were used in this study represented only the four largest Judeo-Christian denominations in the United States. Although this decision also was made by design, it does limit the generalization of the results to other denominations.

### Definitions

College Students are individuals who are attending a fully accredited college or divinity school located in the United States.

DIT P Scores are a percentile index of the relative importance individuals attach to the principled morality, or Kohlberg's Stage 5 and Stage 6, items on the Defining Issues Test (DIT).

Educational Environment includes the type of school attended and the Judeo-Christian denominational affiliation of the school.

Ethics are moral principles concerning the concept of justice in human relationships.

Formal Religious Education is the study of Judeo-Christian philosophy, theology, or ethics at a fully accredited college or divinity school.

School Affiliation identifies the Judeo-Christian denominational association or nonassociation of the institution.

School Type identifies whether an institution is a college or a divinity school.

### Organization of the Research Report

Chapter 1 is an introduction to the study. The introduction includes discussions of the study background, the need for the study, the study assumptions, the purpose of the study, the research questions posed for the study, the hypotheses used in the study, the study delimitations, the study limitations, and the unique definitions for certain terms used in the study. Chapter 2 is a review of the literature pertinent to the study. The literature review is divided into two sections. These sections include discussions of the theoretical foundations for the study and the related moral development research. Chapter 3 is a description of the methodology used for the conduct of the study. This includes discussions of the study design, the study sample, the instrumentation, the data collection, and the linear regression equations used for the testing of hypotheses during the data analysis. Chapter 4 is a discussion of the respondent characteristics and the results of the study from the testing of hypotheses during each phase of the study, including a summary of the findings

by hypothesis. Chapter 5 is a discussion of the study findings to include conclusions, implications, suggested future studies, and recommendations based on those findings.

## CHAPTER 2 LITERATURE REVIEW

### Introduction

The purpose of this study was to determine if there is a significant relationship between formal religious education and the moral judgment development of college students, and, after controlling for formal religious education, to see if there is also a significant relationship between the educational environment or certain selected student characteristics and the moral judgment development of those students. Formal religious education was defined as the study of Judeo-Christian philosophy, theology, or ethics at a fully accredited college or divinity school. Educational environment was defined as the type of school attended and the Judeo-Christian denominational affiliation of the school. The discussion in this chapter was divided into two sections, each section reviewed an area of literature pertinent to the examination

of the relationship between formal religious education and moral judgment development. The two areas were Theoretical Foundations and Related Moral Development Research.

### Theoretical Foundations

The initial theoretical foundation for the investigation of moral stages of development in human beings was laid by Jean Piaget (1932/1965), in a work titled The Moral Judgment of the Child. On the basis of his work with 5-year-old to 13-year-old children, Piaget theorized three overlapping periods in the development of the sense of justice in the moral development of the child: a period based on unilateral respect for the rules of adult authority, a period of progressive egalitarianism based on mutual respect among social peers, and a period of equity based on a flexible golden rule and consideration of the needs of individuals in particular situations.

Building on the work of Piaget, in a trilogy of books, titled The Philosophy of Moral Development: Moral Stages and the Idea of Justice, Vol I (1981), Moral Stages: A Current Formulation and a Response to Critics (1983), and

The Psychology of Moral Development: The Nature and Validity of Moral Stages, Vol II (1984), Lawrence Kohlberg set forth the philosophical and theoretical foundation for his six moral stages. Kohlberg (1981) discussed the following three levels and six stages of moral reasoning:

1. The Preconventional Level. He indicated this level contained Stage 1 reasoning, or the stage of punishment and obedience; and Stage 2 reasoning, or the stage of individual instrumental purpose and exchange.

2. The Conventional Level. He indicated this level contained Stage 3 reasoning, or the stage of mutual interpersonal expectations, relationships, and conformity; and Stage 4 reasoning, or the stage of social system and conscience maintenance.

3. The Principled Level. He indicated this level contained Stage 5 reasoning, or the stage of prior rights and social contract or utility; and Stage 6 reasoning, or the stage of universal ethical principles focused on justice and respect for all.

Kohlberg (1981) also discussed the successive concepts of justice for each of his six stages of moral

development. At Stage 1 justice was conceived as an eye for an eye and a tooth for a tooth. Correct behavior at this stage of moral development was defined as literal obedience to rules and authority, avoiding punishment, and not doing physical harm. At Stage 2 justice was conceived as you help me and I will help you. Correct behavior at this stage of moral development was defined as serving one's own or other's needs and making fair deals in terms of concrete exchange. At Stage 3 justice was conceived as do unto others as you would have them do unto you. Correct behavior at this stage of moral development was defined as playing a good role, being concerned about the other people and their feelings, keeping loyalty and trust with partners, and being motivated to follow rules and expectations. At Stage 4 justice was conceived as a system of roles and rules that were shared and accepted by the entire community. Correct behavior at this stage of moral development was defined as doing one's duty in society, upholding the social order, and maintaining the welfare of society or the group. At Stage 5 justice was conceived as individual liberty, civil rights, equality of opportunity, and contract united by the respect



for the freedom of others. Correct behavior at this stage of moral development was defined as upholding the basic rights, values, and legal contracts of a society, even when they conflict with the concrete rules and laws of the group. At Stage 6 justice was conceived as universal ethical principles that were higher than or prior to law and focused on the rights of humanity, independent of civil society. Correct behavior at this stage of moral development was defined as the assumption of guidance by universal ethical principles that all humanity should follow.

Building on the work of Kohlberg, in two books, titled Development in Judging Moral Issues (1979), and Moral Development: Advances in Research and Theory (1986b), James Rest discussed his Defining Issues Test (DIT) and established the foundation for his Four-Component Model. Rest (1986a) described the DIT as an instrument based on Kohlberg's developmental theory and his six-stage characterization of moral development. He pointed out that the DIT is a recognition test that asks the subjects to classify their own responses, and once those responses are scored the DIT P index provides the location of each subject

in terms of a continuous percentage on a developmental continuum.

One controversy surrounding testing instruments like the DIT, that are based on justice oriented Kohlberg type moral dilemmas, is the claim that males and females experience the social world differently and that justice defined measures of moral development are gender biased. Gilligan (1982), one of the most outspoken critics of justice defined measures, postulated that male social development stresses individuality, while female social development stresses connection between individuals. She contended that these two different patterns of social development result in two different moral orientations. She said that these two moral orientations are the predominantly justice based male orientation and the predominantly care based female orientation. She also contended that these orientations result in the downgrading of female moral development when measured on a justice oriented instrument, and cause women to appear morally inferior to men.

On the other hand, Walker (1985) in a review of studies using various versions of Kohlberg's justice

oriented test concluded that males do not score higher than females. Walker's report included a study that compared justice orientations and care orientations in both spontaneous moral dilemmas and hypothetical moral dilemmas and found no differences in scores based on gender. Snarey, Reimer, and Kohlberg (1985) reported no differences based on gender with regard to scores on Kohlberg's test. Gibbs and Widamon (1982) found no differences in scores based on gender with regard to the justice oriented Kohlberg test. Nisan and Kohlberg (1982) also reported no differences in scores based on gender with regard to the Kohlberg style test. In addition, Rest (1979) indicated there were only 2 of 22 studies using the justice oriented Defining Issues Test that reported a significant difference in DIT P scores between males and females. Rest (1986b) also reported that the differences between males and females with regard to moral development as measured by the DIT are trivial. Finally, Shaver (1985) in a longitudinal study of college students reported that females had significantly higher DIT P scores than males. The indication is that the justice oriented Kohlberg style tests, including the DIT, do not

contain a detectable gender bias that significantly affects female performance.

Rest (1986b) set forth his Four-Component Model that was developed at the University of Minnesota Center for the Study of Ethical Development. He theorized that the following four major kinds of psychological processes were necessary in order for moral behavior to occur:

1. The person must have been able to make some sort of interpretation of the particular situation in terms of what actions were possible, who (including himself) would be affected by each course of action, and how the interested parties would regard such effects on their welfare.
2. The person must have been able to make a judgment about which course of action was morally right (or fair or just or morally good), thus labeling one possible line of action as what a person ought (morally ought) to do in that situation.
3. The person must give priority to moral values above other personal values such that a decision is made to intend to do what is morally right.

4. The person must have sufficient perseverance, ego strength, and implementation skills to be able to follow through on his/her intention to behave morally, to withstand fatigue and flagging will, and to overcome obstacles. (pp. 3-4)

Rest (1986b) also postulated that there are no moral cognitions without affect, and no moral affects without cognitions, leading him to the conclusion that there is no moral behavior that can be separated from the cognitions and affects that prompt moral behavior. These writings of Piaget, Kohlberg, and Rest provided the theoretical foundations for the moral development research that was conducted in this study.

#### Related Moral Development Research

Rest (1986b) indicated that it is essential to cognitive developmental theory to demonstrate that people change over time in the direction postulated by the theory; hence, the demonstration of age trends is the first indication of validity for any measure of moral judgment. Piaget (1932/1965) reported these empirical age trend

results in his research. Colby, Kohlberg, Gibbs, and Lieberman (1983) in an extensive report listed age trends as a major empirical finding. Rest (1979) reported age trend data for validating the Defining Issues Test and indicated that longitudinal studies using the DIT showed a substantial upward movement of approximately ten times more than that of downward movement. In fact, he indicated that age/education accounts for 52 percent of the variance in DIT scores. This work by Piaget, Kohlberg, and Rest strongly supports the conclusion that moral judgment development moves into the higher stages on the Kohlberg moral development scale with an increase in age and/or education.

There are a number of additional studies by other researchers using the DIT that support this upward age trend conclusion with regard to college students. Biggs and Barnett (1981) in a four year study of 82 college students reported upward age trends. Whiteley (1982) in a study of 187 college students also confirmed upward age trends. Mentkowski and Strait (1983) in a four year study of 140 college students concluded that there was evidence of upward age trends. Kitchner, King, Davison, Parker, and Wood

(1984) in a two year study of 56 junior high school, junior college, and graduate school students also reported evidence of upward age trend development.

These age trend studies strongly support the conclusion that individual moral development increases over time, but they do not indicate why this upward age trend change occurs. Several prominent researchers over a number of years have concluded that formal higher education has a significant impact on the moral development of college students. Chickering (1969) reported that developmental changes do occur during the college years and that numerous cross-sectional and longitudinal studies of college students have indicated that changes do occur in individual attitudes, values, and personal integration during the time that students are completing their higher education. Bowen (1977) reported that higher education and the academic environment produce immediate and induced future changes in students emotional and moral development as well as their cognitive learning. Astin (1977) reported that formal higher education has a substantial impact on student attitudes and values. In a secondary analysis of

demographic correlates of the DIT, Rest (1979) reported that formal education was the strongest correlate when compared with individual DIT P scores. Rest (1986b) indicated that one of the strongest and most consistent correlates of moral development is years of formal education. A strong correlation of formal education and moral judgment development was also documented by Colby et al. (1983), showing correlations of 0.53 and 0.60.

These studies of the relationship of formal education to moral judgment development indicate that there is a significant relationship between these two variables. However, this research does not identify what specific aspects of formal education influence this upward movement in moral development. Are there certain formal education courses that have more impact on moral development than other courses? There have been numerous reviews of moral education programs that have indicated that certain types of moral education programs are effective in increasing moral judgment development while others are not. Lockwood (1978) concluded that some moral education programs promote significant increases in moral judgment development as



measured by the stages of development on the Kohlberg moral development scale. Lawrence (1980) suggested that there were moral education programs that increase individual moral judgment development as measured on the Kohlberg moral development scale. Leming (1981) also concluded that certain types of moral education programs increase moral judgment development and significantly accelerate movement into the higher levels of moral development on the Kohlberg scale. The consensus of opinion from these studies was that the moral education programs that were effective were those that lasted longer than a few weeks, and involved the participation of the students in controversial moral dilemmas. Finally, in a meta-analysis of 55 studies, where the Defining Issues Test was used as the measure of moral development, Schlaefli, Rest, and Thoma (1985) concluded that the overall effect of moral education programs is statistically significant when they are considered collectively without regard to type of program. This conclusion seems to go beyond the conclusions reached by the other researchers and suggests that moral education is effective in increasing individual moral judgment

development, regardless of the length of the program or the method of instruction that is used to teach the program.

With regard to these conclusions this researcher intended to investigate the relationship of formal religious education to moral judgment development. Does formal religious education have a significant role to play in moral development as indicated by Lee (1980), or does it have no specific role to play as indicated by Kohlberg (1981)? One of the main disagreements between these two researchers with regard to whether religious education influences moral development appears to be the contention over Kohlberg's definition of religion as religious affiliation. There have been some studies by other researchers that have focused on religious affiliation in attempting to determine if religious education has a significant role to play in moral development. Wahrman (1981) reported that there was not a significant relationship between the religious affiliation of 124 college students and their moral judgment development as measured by the DIT. McGeorge (1976) reported that a longitudinal study of 140 New Zealand college students tested in 1973 showed no significant difference between the

moral development of religiously affiliated college students and those who were not religiously affiliated. However, when he retested 92 of the college students in 1975 the nonaffiliated students were significantly higher in moral judgment development than those who were religiously affiliated. Schomberg (1978) in a study of 289 university freshman reported a nonsignificant relationship between participation in religious activities and the level of moral judgment development. If religious affiliation is used as the sole measure of the effectiveness of religious education, then Kohlberg (1981) probably was correct in stating that religious education has no unique role to play in moral development. However, this researcher agrees with Lee that religion and religious education are comprised of more than mere religious affiliation.

Although the overall relationship of formal education to moral judgment development has been examined in numerous studies, there has been a distinct lack of research that has isolated the relationship of formal religious education to moral judgment development. Consequently, there was little information available to assist this

researcher in developing the parameters for this study. Of the researchers that had examined the relationship of formal religious education to the moral judgment development of college students, none had isolated specific religious education courses. Moreover, some of the researchers who had correlated religious education and moral judgment development had not examined religious education at the college level. Nevertheless, each of these studies provided information that was useful during the conceptualization portion of this research.

In a study of the relationship of religious education, religious commitment, and religious conversion to the moral judgment development of college students, Wolf (1980) found that college students with extensive exposure to religious education received at home, in family life, at church, and at religious schools below the college level, had significantly lower DIT P scores than students with low exposure to the same type religious education. He also reported a nonsignificant relationship between religious conversion and moral judgment development. However, he did not examine religious education at the college level.

In a longitudinal study of students from a state university, a Bible college, and a Christian liberal arts college Shaver (1984) reported that individual DIT P scores increased significantly over the four year period of higher education. Although Shaver did compare the DIT P scores of students from the three different educational environments, as well as a number of selected student characteristics, he did not examine any specific formal religious education courses.

In a longitudinal study of students from a liberal arts college Shaver (1985) reported a significant increase in the DIT P scores of students over the educational period of four years. In addition, he reported that females had significantly higher DIT P scores than males. However, he again did not include an examination of any specific formal religious education courses.

In another longitudinal study of students attending a Christian liberal arts college and a Bible college, that was designed to expand on his 1984 study, Shaver (1987) reported that the DIT P scores of students attending the Christian liberal arts college were significantly higher

than the DIT P scores of students attending the Bible college. Although he again compared the DIT P scores of the students from the two different educational environments, he, for a third time, did not examine any specific formal religious education courses. Moreover, he did not examine any selected student characteristics in this study.

None of these researchers definitively addressed the relationship of formal religious education to moral judgment development, by examining specific formal religious education courses, by comparing the religious affiliation of institutions, or by comparing the characteristics of students from a wide range of diverse educational environments. Furthermore, Wolf (1980) limited his study to only one nonaffiliated state university, and considered only religious education received below the college level. Although two of the studies by Shaver (1984, 1987) included a comparison of educational environments with regard to differences in student DIT P scores, none of the three included an examination of specific formal religious education courses or the religious affiliation of the institutions. Moreover, none of these studies included

any thorough examination, across educational environments, of the relationship of individual student characteristics to moral judgment development after controlling for formal religious education.

## CHAPTER 3 METHODOLOGY

### Introduction

The purpose of this study was to determine if there is a significant relationship between formal religious education and the moral judgment development of college students, and, after controlling for formal religious education, to see if there is also a significant relationship between the educational environment or certain selected student characteristics and the moral judgment development of those students. This chapter contains a description of the study design, the study sample, the survey instruments used, the data collection procedures, and the statistical analyses employed in evaluating the data.

### Design

The research design used in this investigation was a correlational design. The definition of formal religious



education, the random selection of the educational environments, and the selection of the variables to be evaluated were all under the direct control of the researcher. The random selection of the students, and the content of the specific religious education courses were both controlled by the individual institutions.

The study focused on the relationship of formal religious education to the moral judgment development of college students. A standardized moral judgment development test, the Defining Issues Test (DIT) designed by James Rest, was used to gather moral development information; and a one-page questionnaire, designed by the researcher, was used to gather demographic, educational background, religious ideology, and moral values background information.

#### Sample

The colleges and divinity schools used in this study were selected through a two step selection process. First, the four largest Judeo-Christian denominations in the United States were selected from Statistical Abstracts of the United States (U.S. Bureau of the Census, 1989). This

provided five selection categories comprised of all nonaffiliated institutions, and all institutions affiliated with those four denominations: Roman Catholic, Jewish, Southern Baptist and Methodist. Second, 60 fully accredited institutions were selected from The Greenwood Encyclopedia of American Institutions (Ohles & Ohles, 1986a & 1986b) using those five categories. A total of 48 institutions were selected randomly from affiliated colleges and divinity schools, 12 from each of the four denominations previously mentioned. The remaining 12 institutions were selected randomly from nonaffiliated colleges and divinity schools. A participation solicitation letter was sent to the president of each of those 60 institutions. A copy of the participation solicitation letter is included in Appendix A.

The presidents of 12 of the 60 institutions agreed to participate in the study. The participating institutions were located in Alabama, California, Connecticut, Florida, Georgia, Indiana, Missouri, New York, North Carolina, Ohio, and Pennsylvania. Of the 12 institutions, 9 were affiliated and 3 were nonaffiliated. Moreover, 5 of the 12 were colleges and 7 were divinity schools. Of the 5 colleges,

1 was Jewish, 1 was Roman Catholic, 1 was Southern Baptist, and 2 were Colleges of Arts and Sciences from nonaffiliated state universities. Of the 7 divinity schools, 4 were Roman Catholic, 1 was Jewish, 1 was United Methodist, and 1 was interdenominational nonsectarian. The nonaffiliated colleges and nonsectarian divinity school were included mainly for educational environment comparison purposes.

The contact person for each institution, depending on the size of the student population, was instructed to select 50 or 100 students using a simple random sampling technique. Institutions with a population of less than 400 were asked to select only 50 students. Thirty percent of the selected students returned their survey packets, and the answers and scores of 226 respondents were included in the final data base used in the data analysis. The validity of the study sample was strengthened by the fact that the respondents were from 12 different institutions located throughout the United States, and the fact that each returned DIT was required to pass four separate internal checks on respondent reliability before being used in the data analysis. Furthermore, the DIT P score mean for the

respondents used in the study was 44.58, which was virtually identical to the DIT P score mean of 44.02 for the same mix, undergraduates and graduates, reported by James Rest (1986a) in his standardization sample.

### Instrumentation

The six-story version of the Defining Issues Test (DIT) was used to measure the moral judgment development of individual respondents. The DIT was developed by James Rest, Director of the Center for the Study of Ethical Development at the University of Minnesota. The DIT P score was the index used from the Defining Issues Test for comparison of student moral judgment development. Rest (1986b) indicated that the DIT P score index provided the relative importance that an individual attached to the principled morality, or Kohlberg Stage 5 and Stage 6, items on the DIT; and that it was calculated by summing the number of times the Kohlberg Stage 5 and Stage 6 items were chosen as the first, second, third, or fourth important consideration, weighting those ranks by 4, 3, 2, and 1, respectively.

Davison and Robbins (1978), in a review of several studies, concluded that the test/retest reliability for DIT P scores is generally in the high .70s or .80s. They also concluded that the Cronbach's Alpha index of internal consistency for DIT P scores is generally in the high .70s. Rest (1986a) indicated that correlations of the DIT P score with other measures of moral reasoning, such as various versions of Kohlberg's Interview test and the Comprehension of Moral Concepts test, average about .50, with some correlations as high as .60 and .70. In addition, Rest (1986a) also indicated that the DIT P score index has shown the most consistent reliability and validity trends of any index based on the DIT.

The DIT was used in this study because, as Rest (1986a) indicated, it is the most widely used measure of moral judgment; it is the best documented in terms of reliability and validity; it can be mailed to subjects for self-administration and then returned to the researcher for computerized scoring; and it is simpler to score than the Kohlberg interview, which uses a more subjective scoring system and has to be personally administered to each

subject. According to Rest (1986b), the DIT uses Kohlberg type moral dilemmas, with multiple choice answers; it is based on the six theoretical stages of moral reasoning developed by Kohlberg; and it follows the premise that individuals at different stages of moral development interpret moral dilemmas differently, define critical issues of dilemmas differently, and have different ideas about what is right and fair in a given situation. The DIT was developed in a three-story version and a six-story version. The six-story version was selected for use in this study because, according to Rest (1986a), it is a more reliable measurement of moral judgment than the three-story version. A copy of the Defining Issues Test is included in Appendix D.

The one-page questionnaire that accompanied the DIT was designed by this researcher. The questionnaire solicited information concerning 15 selected items of demographic, educational background, religious ideology, and moral values background information. The responses were evaluated with regard to their relationship to DIT P scores, using the linear regression designs described in the Data

Analysis Section of this chapter. A copy of the research questionnaire is included in Appendix C.

### Data Collection

For reasons of confidentiality, institutions would not supply names and addresses of students. The presidents of the 12 institutions that participated in the study agreed to have a representative of their school randomly select students, distribute research packets, and then collect the completed packets and return them, in bulk, to this researcher.

A cover letter that explained the research project and gave instructions for completion was attached to each questionnaire and DIT, both of which had been numbered for control purposes. A return envelope was provided with each packet, in order that respondents could seal the completed questionnaire and DIT inside, then date and sign the envelope for control purposes before returning it to the school representative. A copy of the survey cover letter that was attached to each research packet is included in Appendix B.

Groups of 50 or 100 of these packets then were transmitted to the participating institutions, depending on the size of their student population. Institutions with student populations of less than 400 received 50 packets each, institutions with student populations of 400 or more received 100 packets each. A cover letter explaining the distribution and collection of the research questionnaires was sent to each institution with the research packets. A copy of the distribution letter is included in Appendix E.

A follow-up letter was sent to each school representative at the end of four weeks, requesting the return of all completed research packets. A second follow-up letter was sent at the end of six weeks to those representatives who had not responded to the first follow-up letter. Finally, a follow-up telephone call was made at the end of eight weeks to those representatives who had not responded to the second follow-up letter. A copy of the first follow-up letter is included in Appendix F, and a copy of the second follow-up letter is included in Appendix G.



Institution presidents were given the option of receiving a summary of the completed research project for their institutional use. Respondents were informed that the results of the study would be made available to them, upon request, through the president of their institution.

### Data Analysis

The raw data from each questionnaire and DIT were coded for computer analysis. The DIT raw data were first processed using a computer program designed by the researchers at the University of Minnesota, and adapted by this researcher for use on an IBM computer. As recommended by Rest (1986a), protocols were discarded for those students whose DIT responses failed any of four internal checks on subject reliability. Protocols were discarded for any respondent who had an M score of 8.0 or higher, indicating the score was more than two standard deviations above the average M score; any respondent who had more than eight inconsistencies on any single story; any respondent who had more than two stories with any inconsistencies; and any respondent who had more than one story that had more than

nine items rated the same. The final output of the computer program provided DIT P scores for use with the questionnaire data in all subsequent regression analyses. Regression analyses were performed on all variables using a general purpose regression procedure. These regression analyses were completed in three phases using the Statistical Analysis System (SAS Institute, 1985).

Phase 1 evaluated the relationship of formal religious education to moral judgment development. This was accomplished by examining the relationship of student DIT P scores to the number of Judeo-Christian philosophy, theology, or ethics courses completed. Phase 2 evaluated the relationship of educational environment to moral judgment development, after controlling for significantly related formal religious education courses. This was accomplished by examining the relationship of student DIT P scores to the type of school attended and the affiliation of like types of schools. Phase 3 evaluated the relationship of certain selected student characteristics to moral judgment development, after controlling for significantly related formal religious education courses. This was

accomplished by examining the relationship of student DIT P scores to age, gender, ethnic group, highest degree held, year of study, grade point average, parents' annual income, mother's education level, father's education level, familiarity with Kohlberg's moral development theory, individual religious conversion experience, church/synagogue attendance, religious ideology regarding moral decisions, source of basic moral values, and individual denominational membership.

Since ethics courses were the only type of formal religious education courses that showed a significant relationship to the moral judgment development of college students during the Phase 1 analysis, they were the only courses controlled for in Phase 2 and Phase 3 of this study. All hypotheses were tested at the alpha level of .05. All categorical variables were dummy coded with 1 and 0. In all linear regression equations the categories represented by X components were the ones that were coded 1. The category not represented by an X component was the one coded 0, that was used for comparison with the other X components. The following linear regression equations were used for

hypothesis evaluation in the phases indicated:

1. Phase 1, Hypothesis 1:  $Y=B_0+B_1X_1+E$ , where Y was DIT P scores, and  $X_1$  was the number of Judeo-Christian philosophy, theology, or ethics courses completed.

2. Phase 2, Hypothesis 2:  $Y=B_0+B_1X_1+B_2X_2+E$ , where Y was DIT P scores,  $X_1$  was the number of ethics courses completed, and  $X_2$  was divinity schools. Supplemental Analysis:  $Y=B_0+B_1X_1+E$ , where Y was DIT P scores for either college or divinity school students, and  $X_1$  was the number of ethics courses completed.

3. Phase 2, Hypothesis 3:  $Y=B_0+B_1X_1+B_2X_2+B_3X_3+B_4X_4+E$ , where Y was DIT P scores for either college or divinity school students,  $X_1$  was the number of ethics courses completed,  $X_2$  was Roman Catholic affiliation,  $X_3$  was Jewish affiliation, and  $X_4$  was Southern Baptist affiliation for colleges or United Methodist affiliation for divinity schools.

4. Phase 3, Hypothesis 4:  $Y=B_0+B_1X_1+B_2X_2+E$ , where Y was DIT P scores;  $X_1$  was the number of ethics courses completed; and  $X_2$  was age, male gender, year of study, grade point average, parents' annual income, individuals who were

familiar with Kohlberg's moral development theory, or individuals who had experienced religious conversion.

5. Phase 3 Hypothesis 5:  $Y = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + E$ , where Y was DIT P scores;  $X_1$  was the number of ethics courses completed;  $X_2$  was mothers who were college graduates, fathers who were college graduates, or individuals who believed they should follow established religious rules and biblical commandments in making all moral decisions; and  $X_3$  was mothers with postbaccalaureate degrees, fathers with postbaccalaureate degrees, or individuals who believed they should follow the leadership of the Spirit of God in making all moral decisions.

6. Phase 3, Hypothesis 6:  $Y = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + E$ , where Y was DIT P scores,  $X_1$  was the number of ethics courses completed,  $X_2$  was individuals who went to church/synagogue regularly seeking values or direction for their life,  $X_3$  was individuals who went to church/synagogue regularly out of duty or habit, and  $X_4$  was individuals who did not go to church/synagogue regularly.

7. Phase 3, Hypothesis 7:  $Y = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + E$ , where Y was DIT P scores;  $X_1$  was the number of

ethics courses completed;  $X_2$  was Asian-Americans, individuals who had completed an Associate degree, or individuals who felt their basic moral values had come mainly from friends;  $X_3$  was Black-Americans, individuals who had completed a Baccalaureate degree, or individuals who felt their basic moral values had come mainly from teachers;  $X_4$  was Hispanic-Americans, individuals who had completed a Master degree, or individuals who felt their basic moral values had come mainly from ministers; and  $X_5$  was Native Americans, individuals who had completed a Doctorate degree, or individuals who felt their basic moral values had come mainly from sources other than those specified.

8. Phase 3, Hypothesis 8:  $Y = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + B_6 X_6 + B_7 X_7 + B_8 X_8 + B_9 X_9 + B_{10} X_{10} + E$ , where  $Y$  was DIT P scores,  $X_1$  was the number of ethics courses completed,  $X_2$  was Roman Catholic,  $X_3$  was Southern Baptist,  $X_4$  was United Methodist,  $X_5$  was Episcopalian,  $X_6$  was Presbyterian,  $X_7$  was American/Independent Baptist,  $X_8$  was United Church of Christ/Christian Church/Fundamentalist/Reformed,  $X_9$  was Unitarian/Quaker/Mennonite, and  $X_{10}$  was no denominational membership.

## CHAPTER 4 DATA ANALYSIS

### Introduction

The purpose of this study was to determine if there is a significant relationship between formal religious education and the moral judgment development of college students, and, after controlling for formal religious education, to see if there is also a significant relationship between the educational environment or certain selected student characteristics and the moral judgment development of those students. Formal religious education was defined as the study of Judeo-Christian philosophy, theology, or ethics at a fully accredited college or divinity school. The educational environment was defined as the type of institution attended and the Judeo-Christian denominational affiliation of the institution. The selected student characteristics included age, gender, ethnic group, highest degree held, year of study, grade point average,

parents' annual income, mother's education level, father's education level, familiarity with Kohlberg's moral development theory, individual religious conversion experience, church/synagogue attendance, religious ideology regarding moral decisions, source of basic moral values, and individual denominational membership.

The remainder of this chapter contains a discussion of the characteristics of the 226 respondents used in the study, and a discussion of the data produced by the linear regression analysis of each hypothesis. The respondents were students who were attending colleges and divinity schools in 11 different states located throughout the United States. General purpose linear regression models were used to compare DIT P scores with the coded data from the respondent questionnaires. All hypotheses were tested at the confidence level of .05, using the Statistical Analysis System (SAS). All categorical variables were dummy coded with 1 and 0. In all linear regression equation models the categories represented by X components were the ones that were coded 1. The category not represented by an X component was the category coded 0, that was used for



comparison with the other X components in the regression equation model.

### Respondent Characteristics

Over 51% of the study respondents were students from liberal arts colleges. Over 56% indicated they were under 25 years of age. Over 66% reported they were male. Over 91% said they were white. Over 35% indicated parental income of \$20,000 to \$50,000. A complete list of these student demographics is included in Table 4-1.

Over 22% of the study respondents indicated they were in their senior year of study. Over 37% reported they had a grade point average between 3.0 and 3.4. Over 54% said they had not completed a baccalaureate degree. Over 55% indicated they had completed one or more Judeo-Christian philosophy courses. Over 77% reported they had completed one or more theology courses. Over 57% said they had completed one or more ethics courses. A complete list of these student educational background characteristics is included in Table 4-2.

Table 4-1

Student Demographics

<u>Characteristics</u>	<u>Number</u>	<u>Percent</u>
<u>Students by School Type</u>		
Divinity School Students	110	48.7
Liberal Arts College Students	116	51.3
<u>Student Age</u>		
17-24	127	56.2
25-29	32	14.2
30-39	32	14.2
40-49	16	7.1
50 +	10	4.4
No Response	9	3.9
<u>Gender</u>		
Male	150	66.4
Female	76	33.6
<u>Ethnic Group</u>		
Asian-American	6	2.7
Black	3	1.3
Hispanic	7	3.1
Native American	3	1.3
White	206	91.2
No Response	1	.4
<u>Parents' Annual Income</u>		
< 20,000	10	4.4
20 - 50,000	80	35.4
51 - 75,000	28	12.4
76 - 100,000	26	11.5
101 - 200,000	9	4.0
> 200,000	2	.9
No Response	71	31.4

Table 4-2

Student Educational Background

<u>Characteristic</u>	<u>Number</u>	<u>Percent</u>
<u>Year of Study</u>		
Freshman	27	11.9
Sophomore	15	6.6
Junior	30	13.3
Senior	51	22.6
Postbaccalaureate Yr 1	36	15.9
Postbaccalaureate Yr 2	32	14.2
Postbaccalaureate Yr 3	22	9.7
Postbaccalaureate Yr 4+	13	5.8
<u>Grade Point Average</u>		
2.0 - 2.4	9	4.0
2.5 - 2.9	27	12.0
3.0 - 3.4	75	33.2
3.5 - 3.9	84	37.1
4.0	3	1.3
No Response	28	12.4
<u>Degrees Held</u>		
None	96	42.5
Associate	27	12.0
Baccalaureate	71	31.4
Master	31	13.7
PhD/EdD	1	.4
<u>Formal Religious Education</u>		
Completed Judeo-Christian Philosophy Courses	125	55.3
No Judeo-Christian Philosophy Courses	101	44.7
Completed Theology Courses	175	77.4
No Theology Courses	51	22.6
Completed Ethics Courses	130	57.5
No Ethics Courses	96	42.5

Over 58% of the study respondents indicated their mother was not a college graduate. Over 57% reported their father was a college graduate. Over 55% said they were members of the Roman Catholic denomination. A complete list of these parent educational and student denominational background characteristics is included in Table 4-3.

Over 39% of the respondents indicated they believed they should follow the leadership of the Spirit of God in making all moral decisions. Over 91% reported that their basic moral values came mainly from their family. Over 67% of the respondents said they were not familiar with the moral development theory of Lawrence Kohlberg. Over 51% indicated they had not experienced religious conversion. Over 72% reported they attended church or synagogue regularly seeking values or direction for their life. A complete list of these student religious ideology and moral values background characteristics is included in Table 4-4.

#### Phase 1 Analysis

During the Phase 1 analysis the relationship of the number of completed Judeo-Christian philosophy courses,

Table 4-3

Parent Educational and Student Denominational Background

<u>Characteristic</u>	<u>Number</u>	<u>Percent</u>
<u>Mother's education level</u>		
No High School Diploma	16	7.1
High School Graduate	116	51.3
College Graduate	66	29.2
Postbaccalaureate Degree	28	12.4
<u>Father's education level</u>		
No High School Diploma	16	7.1
High School Graduate	79	35.0
College Graduate	76	33.6
Postbaccalaureate Degree	55	24.3
<u>Denominational membership</u>		
Roman Catholic	126	55.8
Jewish	11	5.0
Southern Baptist	26	11.5
United Methodist	19	8.4
Episcopalian	13	5.8
Presbyterian	9	4.0
Independent Baptist	4	1.8
American Baptist	3	1.3
United Church of Christ	4	1.8
Reformed	1	.4
Christian Church	1	.4
Fundamentalist	1	.4
Quaker	1	.4
Mennonite	1	.4
Unitarian	1	.4
None	5	2.2

Table 4-4

Student Religious Ideology and Moral Values Background

<u>Characteristic</u>	<u>Number</u>	<u>Percent</u>
<u>Religious ideology regarding moral decisions</u>		
Follow Religious Rules & Biblical Commands	66	29.2
Follow Own Moral Reasoning	68	30.1
Follow Leadership of Spirit of God	89	39.4
No Response	3	1.3
<u>Source of basic moral values</u>		
Family	206	91.2
Friends	3	1.3
Teachers	5	2.2
Ministers	4	1.8
Others	8	3.5
<u>Familiarity with Kohlberg</u>		
Yes	73	32.3
No	152	67.3
No Response	1	.4
<u>Experienced religious conversion</u>		
Yes	107	47.4
No	116	51.3
No Response	3	1.3
<u>Pattern of church/synagogue attendance</u>		
Attend Regularly Seeking Values	163	72.1
Attend Regularly Out of Duty/Habit	16	7.1
Do Not Attend Regularly	35	15.5
Do Not Attend At All	9	4.0
No Response	3	1.3

theology courses, or ethics courses to DIT P scores was tested. Hypothesis 1 postulated that there would be no difference, based on the number and type of formal religious education courses completed, in the DIT P scores of college students. This null hypothesis was tested with a general purpose regression model using  $Y=B_0+B_1X_1+E$  as the linear regression equation. The significance level for the F-test was established at .05.

The SAS regression model procedure was executed using DIT P scores as the value of Y, and the number of Judeo-Christian philosophy, theology, or ethics courses completed as the value of  $X_1$ . The results of those linear regression analyses are included in Tables 4-5 through 4-7.

Only one independent variable, ethics courses completed, had a significant relationship to the dependent variable DIT P scores. The computer model indicated that students averaged 1.75 points higher on their DIT P scores for each ethics course completed. The probability of values greater than |T| for this independent variable was .007. The other two independent variables, Judeo-Christian philosophy courses completed and theology courses completed,

Table 4-5

Results for Hypothesis 1 -- Philosophy Courses

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	1	97.825	97.825	0.487	0.4861
Error	224	45027.269	201.015		
C Total	225	45125.094			

DEP MEAN	44.581	ROOT MSE	14.178	R-Square	0.0022
C.V.	31.803			ADJ R-SQ	-0.0023

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	44.899	1.047	42.864	0.0001
Philosophy Courses	1	-0.173	0.248	-0.698	0.4861



Table 4-6

Results for Hypothesis 1 -- Theology Courses

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	1	126.974	126.974	0.632	0.4274
Error	224	44998.120	200.884		
C Total	225	45125.094			

DEP MEAN	44.581	ROOT MSE	14.173	R-Square	0.0028
C.V.	31.793			ADJ R-SQ	-0.0016

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	44.153	1.085	40.679	0.0001
Theology Courses	1	0.142	0.179	0.795	0.4274

Table 4-7

Results for Hypothesis 1 -- Ethics Courses

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	1	1445.355	1445.355	7.412	0.0070
Error	224	43679.739	194.999		
C Total	225	45125.094			

DEP MEAN	44.581	ROOT MSE	13.964	R-Square	0.0320
C.V.	31.324			ADJ R-SQ	0.0277

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	42.742	1.148	37.222	0.0001
Ethics Courses	1	1.753	0.644	2.723	0.0070

did not have a significant relationship to DIT P scores. Because there was a significant relationship between student DIT P scores and the number of ethics courses completed, Hypothesis 1 was rejected. The reader will note that due to the confounding effect of number of ethics courses completed and school type, that was identified during the Hypothesis 2 analysis, the results of the Hypothesis 2 supplemental analysis must be considered when drawing conclusions or implications from the Hypothesis 1 finding.

### Phase 2 Analysis

During the Phase 2 analysis the relationship of school type and school affiliation to DIT P scores was tested, after controlling for significantly related formal religious education courses. Hypothesis 2 postulated that, after controlling for ethics courses completed, there would be no difference, based on school type, in the DIT P scores of college students. This null hypothesis was tested with a general purpose regression model using  $Y=B_0+B_1X_1+B_2X_2+E$  as the linear regression equation. The significance level for the F-test was established at .05.

The SAS regression model procedure was executed using DIT P scores as the value of Y, ethics courses completed as the value of  $X_1$ , and divinity schools as the value of  $X_2$ . The results of that linear regression analysis are included in Table 4-8.

There was a significant difference, based on school type, between the DIT P scores of students attending divinity schools and the DIT P scores of students attending liberal arts colleges. The computer model indicated that divinity school students averaged 5.5 points higher on their DIT P scores than students attending liberal arts colleges. The probability of values greater than  $|T|$  for this independent variable was .0038. Because there was a significant difference between the DIT P scores of students attending divinity schools and the DIT P scores of students attending liberal arts colleges, Hypothesis 2 was rejected.

Due to the confounding effect of number of ethics courses completed and school type, that was identified during the data analysis of Hypothesis 2, a supplemental analysis was performed to examine the relationship of DIT P scores to ethics courses completed by students from each

Table 4-8

Results for Hypothesis 2 -- School Type

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	2	3055.964	1527.982	8.100	0.0004
Error	223	42069.130	188.651		
C Total	225	45125.094			

DEP MEAN	44.581	ROOT MSE	13.735	R-Square	0.0677
C.V.	30.809			ADJ R-SQ	0.0594

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	40.584	1.350	30.069	0.0001
Ethics	1	1.238	0.657	1.884	0.0608
Divinity Schools	1	5.543	1.897	2.922	0.0038

type of school. This analysis was accomplished using the general purpose regression model  $Y=B_0+B_1X_1+E$  as the linear regression equation. The significance level for the F-test was established at .05.

The SAS regression model procedure was executed using DIT P scores of liberal arts college students or divinity school students as the value of Y, and number of ethics courses completed as the value of  $X_1$ . The results of those linear regression analyses are included in Tables 4-9 and 4-10.

There was a significant relationship between the number of ethics courses completed and the DIT P scores of students attending colleges of liberal arts and sciences. The computer model indicated that liberal arts college students averaged 2.93 points higher on their DIT P scores for each ethics course completed. The probability of values greater than |T| for this independent variable was .0185.

On the other hand, the relationship between the number of ethics courses completed and the DIT P scores of students attending divinity schools was not significant. A full discussion of the confounding effect of number of

Table 4-9

Results for Hypothesis 2 Supplement -- Liberal Arts Colleges

Dependent Variable = DIT P Scores

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	1	902.965	902.965	5.709	0.0185
Error	114	18032.054	158.176		
C Total	115	18935.019			
DEP MEAN	41.416	ROOT MSE	12.577	R-Square	0.0477
C.V.	30.367			ADJ R-SQ	0.0393

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	39.450	1.429	27.613	0.0001
Ethics	1	2.925	1.224	2.389	0.0185

Table 4-10

Results for Hypothesis 2 Supplement -- Divinity Schools

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	1	162.741	162.741	0.743	0.3905
Error	108	23641.236	218.900		
C Total	109	23803.977			
DEP MEAN	47.917	ROOT MSE	14.795	R-Square	0.0068
C.V.	30.877			ADJ R-SQ	-0.0024

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	46.904	1.836	25.546	0.0001
Ethics	1	0.701	0.813	0.862	0.3905



ethics courses completed and school type is provided in Chapter 5.

Hypothesis 3 postulated that, after controlling for ethics courses completed, there would be no difference, based on school affiliation, in the DIT P scores of college students attending the same type of school. This null hypothesis was tested with a general purpose regression model using  $Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + E$  as the linear regression equation. The significance level for the F-test was established at .05.

The SAS regression model procedure was executed using DIT P scores as the value of Y, ethics courses completed as the value of  $X_1$ , Roman Catholic college as the value of  $X_2$ , Jewish college as the value of  $X_3$ , and Southern Baptist college as the value of  $X_4$ . The results of that linear regression analysis are included in Table 4-11.

There was not a significant difference, based on school affiliation, between the DIT P scores of students attending the Jewish affiliated college and the DIT P scores of students attending the nonaffiliated colleges. However, there was a significant difference, based on

Table 4-11

Results for Hypothesis 3 -- Liberal Arts College Affiliation

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	4	2495.250	623.813	4.212	0.0033
Error	111	16439.769	148.106		
C Total	115	18935.019			

DEP MEAN	41.416	ROOT MSE	12.170	R-Square	0.1318
C.V.	29.384			ADJ R-SQ	0.1005

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	47.705	3.052	15.629	0.0001
Ethics	1	2.101	1.323	1.588	0.1150
Rom Catholic	1	-8.591	3.294	-2.608	0.0104
Jewish	1	4.091	9.880	0.414	0.6796
So Baptist	1	-11.217	3.819	-2.937	0.0040

school affiliation, between the DIT P scores of students attending the Roman Catholic affiliated college or the Southern Baptist affiliated college, and the DIT P scores of students attending the nonaffiliated colleges. The computer model indicated that students attending the Roman Catholic affiliated college averaged 8.59 points lower on their DIT P scores than students attending the nonaffiliated colleges. The probability of values greater than |T| for this independent variable was .0104. The computer model also indicated that students attending the Southern Baptist affiliated college averaged 11.22 points lower on their DIT P scores than students attending the nonaffiliated colleges. The probability of values greater than |T| for this independent variable was .004.

The SAS regression model procedure then was executed using DIT P scores as the value of Y, ethics courses completed as the value of  $X_1$ , Roman Catholic divinity school as the value of  $X_2$ , Jewish divinity school as the value of  $X_3$ , and United Methodist divinity school as the value of  $X_4$ . The results of that linear regression analysis are included in Table 4-12.

Table 4-12

Results for Hypothesis 3 -- Divinity School Affiliation

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	4	2547.921	636.981	3.147	0.0174
Error	105	21256.057	202.439		
C Total	109	23803.977			

DEP MEAN	47.917	ROOT MSE	14.228	R-Square	0.1070
C.V.	29.693			ADJ R-SQ	0.0730

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	52.542	3.225	16.290	0.0001
Ethics	1	0.326	0.802	0.406	0.6854
Rom Catholic	1	-8.770	3.472	-2.526	0.0130
Jewish	1	4.531	5.188	0.873	0.3844
U Methodist	1	-6.139	4.512	-1.360	0.1766

There was not a significant difference, based on school affiliation, between the DIT P scores of students attending the Jewish divinity school or the United Methodist divinity school, and the DIT P scores of students attending the nonsectarian divinity school. Conversely, there was a significant difference between the DIT P scores of students attending the Roman Catholic divinity schools, and the DIT P scores of students attending the nonsectarian divinity school. The computer model indicated that students attending Roman Catholic divinity schools averaged 8.77 points lower on their DIT P scores than students attending the nonsectarian divinity school. The probability of values greater than  $|T|$  for this independent variable was .013. Because there was a significant difference between the DIT P scores of students attending the nonaffiliated colleges and the DIT P scores of students attending the Roman Catholic college or the Southern Baptist college, and there was also a significant difference between the DIT P scores of students attending the nonsectarian divinity school and the DIT P scores of students attending the Roman Catholic divinity schools, Hypothesis 3 was rejected.

### Phase 3 Analysis

During the Phase 3 analysis the relationship of respondent's age, gender, ethnic group, highest degree held, year of study, grade point average, parents' annual income, mother's education level, father's education level, familiarity with Kohlberg's moral development theory, individual religious conversion experience, church/synagogue attendance, religious ideology regarding moral decisions, source of basic moral values, and individual denominational membership to DIT P scores was tested, after controlling for formal religious education courses that had shown a significant relationship to DIT P scores in the Phase 1 analysis. The reader will recall that ethics courses were the only courses in that category.

Hypothesis 4 postulated that, after controlling for ethics courses completed, there would be no difference, based on age, gender, year of study, grade point average, parents' annual income, familiarity with Kohlberg's moral development theory, or individual religious conversion experience, in the DIT P scores of college students. This

null hypothesis was tested with a general purpose regression model using  $Y=B_0+B_1X_1+B_2X_2+E$  as the linear regression equation. The significance level for the F-test was established at .05.

The SAS regression model procedure was executed using DIT P scores as the value of Y; ethics courses completed as the value of  $X_1$ ; and age, male gender, year of study, grade point average, parents' annual income, individuals who were familiar with Kohlberg's moral development theory, or individuals who had experienced religious conversion as the value of  $X_2$ . There was not a significant difference in the DIT P scores of college students based on age, grade point average, parents' annual income, familiarity with Kohlberg's moral development theory, or individual religious conversion experience. The results of those linear regression analyses are included in Tables 4-13 through 4-17.

On the other hand, there was a significant difference in the DIT P scores of college students based on gender and year of study. The results of those linear regression analyses are included in Tables 4-18 and 4-19.

Table 4-13

Results for Hypothesis 4 -- Age

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	2	2143.876	1071.938	5.451	0.0049
Error	214	42082.373	196.647		
C Total	216	44226.249			

DEP MEAN	44.588	ROOT MSE	14.023	R-Square	0.0485
C.V.	31.450			ADJ R-SQ	0.0396

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	37.580	2.840	13.233	0.0001
Ethics	1	1.647	0.729	2.259	0.0249
Age	1	0.200	0.101	1.971	0.0501



Table 4-14

Results for Hypothesis 4 -- Grade Point Average

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	2	2489.637	1244.818	6.843	0.0013
Error	195	35474.294	181.919		
C Total	197	37963.931			

DEP MEAN	44.239	ROOT MSE	13.488	R-Square	0.0656
C.V.	30.488			ADJ R-SQ	0.0560

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	28.487	7.218	3.947	0.0001
Ethics	1	2.077	0.671	3.093	0.0023
GPA	1	4.127	2.176	1.897	0.0593

Table 4-15

Results for Hypothesis 4 -- Parents' Annual Income

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	2	635.736	317.868	1.718	0.1829
Error	152	28119.978	185.000		
C Total	154	28755.714			

DEP MEAN	44.141	ROOT MSE	13.601	R-Square	0.0221
C.V.	30.814			ADJ R-SQ	0.0092

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	41.087	2.049	20.052	0.0001
Ethics	1	1.014	0.748	1.356	0.1772
Parents' Annual Income	1	0.034	0.025	1.349	0.1794

Table 4-16

Results for Hypothesis 4 -- Familiarity with Kohlberg

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	2	1693.286	846.643	4.342	0.0141
Error	222	43284.274	194.974		
C Total	224	44977.560			

DEP MEAN	44.527	ROOT MSE	13.963	R-Square	0.0376
C.V.	31.359			ADJ R-SQ	0.0290

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	42.103	1.256	33.516	0.0001
Ethics	1	1.554	0.661	2.352	0.0196
Kohlberg Theory	1	2.468	2.039	1.210	0.2275

Table 4-17

Results for Hypothesis 4 -- Religious Conversion

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	2	1954.912	977.456	5.036	0.0073
Error	220	42703.616	194.107		
C Total	222	44658.528			

DEP MEAN	44.418	ROOT MSE	13.932	R-Square	0.0438
C.V.	31.366			ADJ R-SQ	0.0351

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	43.738	1.438	30.413	0.0001
Ethics	1	1.874	0.645	2.905	0.0040
Conversion	1	-2.715	1.871	-1.451	0.1482

Table 4-18

Results for Hypothesis 4 -- Gender

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	2	4293.455	2146.727	11.724	0.0001
Error	223	40831.640	183.102		
C Total	225	45125.094			

DEP MEAN	44.581	ROOT MSE	13.532	R-Square	0.0951
C.V.	30.353			ADJ R-SQ	0.0870

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	47.577	1.656	28.738	0.0001
Ethics	1	1.908	0.625	3.052	0.0025
Male Gender	1	-7.529	1.909	-3.944	0.0001

Table 4-19

Results for Hypothesis 4 -- Year of Study

Dependent Variable = DIT P Score

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Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	2	5642.231	2821.116	15.934	0.0001
Error	223	39482.863	177.053		
C Total	225	45125.094			

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DEP MEAN	44.581	ROOT MSE	13.306	R-Square	0.1250
C.V.	29.847			ADJ R-SQ	0.1172

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Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	33.732	2.150	15.690	0.0001
Ethics	1	0.412	0.672	0.612	0.5409
Yr of Study	1	2.405	0.494	4.869	0.0001

---

When the linear regression procedure was run using male gender as the value of  $X_2$ , the computer model indicated that males averaged 7.53 points lower on their DIT P scores than females. The probability of values greater than  $|T|$  for this independent variable was .0001. When the linear regression procedure was run using year of study as the value of  $X_2$ , the computer model indicated that students averaged 2.41 points higher on their DIT P scores for each completed year of study. The probability of values greater than  $|T|$  for this independent variable was .0001. Because there was a significant difference in student DIT P scores based on gender and year of study, Hypothesis 4 was rejected.

Hypothesis 5 postulated that, after controlling for ethics courses completed, there would be no difference, based on mother's education level, father's education level, or religious ideology regarding moral decisions, in the DIT P scores of college students. This null hypothesis was tested with a general purpose regression model using  $Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + E$  as the linear regression equation. The significance level for the F-test was established at .05.

The SAS regression model procedure was executed using DIT P scores as the value of Y; ethics courses completed as the value of  $X_1$ ; mothers with baccalaureate degrees, fathers with baccalaureate degrees, or students who believed they should follow established religious rules and biblical commandments in making all moral decisions as the value of  $X_2$ ; and mothers with postbaccalaureate degrees, fathers with postbaccalaureate degrees, or students who believed they should follow the leadership of the Spirit of God in making all moral decisions as the value of  $X_3$ . The results of those linear regression analyses are included in Tables 4-20 through 4-22.

When the linear regression procedure was run using mothers with baccalaureate degrees as the value of  $X_2$ , and mothers with postbaccalaureate degrees as the value of  $X_3$ ; there was a significant difference between the DIT P scores of students whose mothers had completed a baccalaureate degree, and the DIT P scores of students whose mothers had not completed a college degree. The computer model indicated that students whose mothers had completed a baccalaureate degree averaged 4.19 points higher on



Table 4-20

Results for Hypothesis 5 -- Mother's Education Level

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	3	2415.338	805.113	4.185	0.0066
Error	222	42709.756	192.386		
C Total	225	45125.094			

DEP MEAN	45.581	ROOT MSE	13.870	R-Square	0.0535
C.V.	31.113			ADJ R-SQ	0.0407

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	40.923	1.403	29.160	0.0001
Ethics	1	1.819	0.647	2.812	0.0054
Mom Bac	1	4.193	2.103	1.994	0.0474
Mom Postbac	1	4.242	2.895	1.465	0.1443

Table 4-21

Results for Hypothesis 5 -- Father's Education Level

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	3	3239.856	1079.952	5.724	0.0009
Error	222	41885.238	188.672		
C Total	225	45125.094			

DEP MEAN	44.581	ROOT MSE	13.736	R-Square	0.0718
C.V.	30.811			ADJ R-SQ	0.0593

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	40.931	1.599	25.590	0.0001
Ethics	1	1.774	0.636	2.790	0.0057
Dad Bac	1	0.438	2.123	0.206	0.8367
Dad Postbac	1	6.747	2.329	2.896	0.0042

Table 4-22

Results for Hypothesis 5 -- Religious Ideology

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	3	2316.995	772.332	4.019	0.0082
Error	219	42084.384	192.166		
C Total	222	44401.379			

DEP MEAN	44.425	ROOT MSE	13.862	R-Square	0.0522
C.V.	31.204			ADJ R-SQ	0.0392

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	44.967	1.872	24.025	0.0001
Ethics	1	1.686	0.674	2.501	0.0131
Follow Rules	1	-5.406	2.399	-2.254	0.0252
Follow Spirit	1	-1.593	2.249	-0.708	0.4796

their DIT P scores than students whose mothers had not completed a college degree. The probability of values greater than  $|T|$  for this independent variable was .0474. When the linear regression procedure was run using fathers with baccalaureate degrees as the value of  $X_2$ , and fathers with postbaccalaureate degrees as the value of  $X_3$ ; there was a significant difference between the DIT P scores of students whose fathers had completed a postbaccalaureate degree, and the DIT P scores of students whose fathers had not completed a college degree. The computer model indicated that students whose fathers had completed a postbaccalaureate degree averaged 6.75 points higher on their DIT P scores than students whose fathers had not completed a college degree. The probability of values greater than  $|T|$  for this independent variable was .0042. When the linear regression procedure was run, using the religious ideology of following established religious rules and biblical commandments regarding moral decisions as the value of  $X_2$ , and the religious ideology of following the leadership of the Spirit of God regarding moral decisions as the value of  $X_3$ , there was a significant difference between

the DIT P scores of students whose ideology was to follow established religious rules and biblical commandments regarding moral decisions, and the DIT P scores of students whose ideology was to follow their own moral reasoning regarding moral decisions. The computer model indicated that students whose ideology was to follow established religious rules and biblical commandments averaged 5.41 points lower on their DIT P scores than students whose ideology was to follow their own moral reasoning. The probability of values greater than  $|T|$  for this independent variable was .0252. Because there was a significant difference in student DIT P scores based on mother's and father's education level, and religious ideology regarding moral decisions, Hypothesis 5 was rejected.

Hypothesis 6 postulated that, after controlling for ethics courses completed, there would be no difference, based on church/synagogue attendance, in the DIT P scores of college students. This null hypothesis was tested with a general purpose regression model using  $Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + E$  as the linear regression equation. The significance level for the F-test was established at .05.

The SAS regression model procedure was executed using DIT P scores as the value of Y, ethics courses completed as the value of  $X_1$ , regular church/synagogue attendance seeking values or direction for life as the value of  $X_2$ , regular church/synagogue attendance out of duty or habit as the value of  $X_3$ , and nonregular church/synagogue attendance as the value of  $X_4$ . The results of that linear regression analysis are included in Table 4-23.

There was not a significant difference between the DIT P scores of students who attended church/synagogue regularly or nonregularly and the DIT P scores of students who never attended. Because there was not a significant difference in the DIT P scores of college students based on their pattern of church/synagogue attendance, Hypothesis 6 was not rejected.

Hypothesis 7 postulated that, after controlling for ethics courses completed, there would be no difference, based on ethnic group, highest degree held, or basic source of moral values, in the DIT P scores of college students. This null hypothesis was tested with a general purpose regression model using  $Y = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + E$  as

Table 4-23

Results for Hypothesis 6 -- Church/Synagogue Attendance

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	4	1330.526	332.632	1.688	0.1537
Error	218	42952.318	197.029		
C Total	222	44282.844			

DEP MEAN	44.368	ROOT MSE	14.037	R-Square	0.0300
C.V.	31.637			ADJ R-SQ	0.0122

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	40.906	4.725	8.657	0.0001
Ethics	1	1.660	0.659	2.520	0.0124
Values/Direct	1	1.462	4.807	0.304	0.7614
Duty/Habit	1	3.118	5.854	0.533	0.5948
Nonregular	1	2.961	5.246	0.564	0.5730

the linear regression equation. The significance level for the F-test was established at .05.

The SAS regression model procedure was executed using DIT P scores as the value of Y; ethics courses completed as the value of  $X_1$ ; basic moral values from friends, Asian-American, or Associate Degree as the value of  $X_2$ ; basic moral values from teachers, Black-American, or Baccalaureate Degree as the value of  $X_3$ ; basic moral values from ministers, Hispanic-American, or Master Degree as the value of  $X_4$ ; and basic moral values from other specified sources, Native American, or Doctorate Degree as the value of  $X_5$ . The results of those linear regression analyses are included in Tables 4-24 through 4-26.

When the linear regression procedure was run using basic moral values from friends as the value of  $X_2$ , basic moral values from teachers as the value of  $X_3$ , basic moral values from ministers as the value of  $X_4$ , and basic moral values from other specified sources as the value of  $X_5$ , there was not a significant difference between the DIT P scores of those students and the DIT P scores of students who indicated their family was the basic source of their



Table 4-24

Results for Hypothesis 7 -- Source of Basic Moral Values

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	5	1790.776	358.155	1.818	0.1103
Error	220	43334.319	196.974		
C Total	225	45125.094			

DEP MEAN	44.581	ROOT MSE	14.035	R-Square	0.0397
C.V.	31.482			ADJ R-SQ	0.0179

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	42.808	1.168	36.643	0.0001
Ethics	1	1.730	0.665	2.601	0.0099
Friends	1	-1.305	8.162	-0.160	0.8731
Teachers	1	-7.242	6.377	-1.136	0.2573
Ministers	1	2.372	7.094	0.334	0.7384
Others	1	2.651	5.177	0.512	0.6092

Table 4-25

Results for Hypothesis 7 -- Ethnic Group

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	5	3482.101	696.420	3.671	0.0033
Error	219	41550.799	189.730		
C Total	224	45032.900			

DEP MEAN	44.623	ROOT MSE	13.774	R-Square	0.0773
C.V.	30.868			ADJ R-SQ	0.0563

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	43.299	1.162	37.265	0.0001
Ethics	1	1.686	0.646	2.612	0.0096
Asian-Amer	1	-14.878	5.713	-2.604	0.0098
Black	1	-14.994	8.022	-1.869	0.0629
Hispanic	1	3.804	5.357	0.710	0.4784
Native Amer	1	1.977	8.013	0.247	0.8054

Table 4-26

Results for Hypothesis 7 -- Highest Degree Held

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	5	5986.363	1197.273	6.730	0.0001
Error	220	39138.731	177.903		
C Total	225	45125.094			

DEP MEAN	44.581	ROOT MSE	13.338	R-Square	0.1327
C.V.	29.919			ADJ R-SQ	0.1129

Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	39.034	1.410	27.686	0.0001
Ethics	1	0.670	0.652	1.026	0.3058
Associate	1	4.196	2.912	1.441	0.1510
Bachelor	1	8.254	2.169	3.805	0.0002
Master	1	12.804	2.866	4.467	0.0001
PhD/EdD	1	-1.403	13.410	-0.105	0.9168

moral values. When the linear regression procedure was run using Asian-American as the value of  $X_2$ , Black-American as the value of  $X_3$ , Hispanic-American as the value of  $X_4$ , and Native American as the value of  $X_5$ , there was a significant difference in some DIT P scores. There was not a significant difference between the DIT P scores of Black, Hispanic, or Native American students and the DIT P scores of White students. Conversely, there was a significant difference between the DIT P scores of Asian-American students and the DIT P scores of White-American students. The computer model indicated that Asian-American students averaged 14.88 points lower on their DIT P scores than White students. The probability of values greater than  $|T|$  for this independent variable was 0.0098. When the linear regression procedure was run using Associate Degree as the value of  $X_2$ , Baccalaureate Degree as the value of  $X_3$ , Master Degree as the value of  $X_4$ , and Doctorate Degree as the value of  $X_5$ ; there was a significant difference in some DIT P scores. There was not a significant difference between the DIT P scores of students who held associate degrees or doctorate degrees and the DIT P scores of students who did

not hold a college degree. On the other hand, there was a significant difference between the DIT P scores of students who held baccalaureate degrees or master degrees and the DIT P scores of students who did not hold a college degree. The computer model indicated that students who had completed baccalaureate degrees averaged 8.25 points higher on their DIT P scores than students who had not completed a college degree. The probability of values greater than  $|T|$  for this independent variable was 0.0002. The computer model also indicated that students who had completed master degrees averaged 12.80 points higher on their DIT P scores than students who had not completed a college degree. The probability of values greater than  $|T|$  for this independent variable was 0.0001. Because there was a significant difference in student DIT P scores based on ethnic group and highest degree held, Hypothesis 7 was rejected.

Hypothesis 8 postulated that, after controlling for ethics courses completed, there would be no difference, based on individual denominational membership, in the DIT P scores of college students. This null hypothesis was tested with a general purpose regression model using

$$Y = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + B_6 X_6 + B_7 X_7 + B_8 X_8 + B_9 X_9 + B_{10} X_{10} + E$$

as the linear regression equation. The significance level for the F-test was established at .05.

The SAS regression model procedure was executed using DIT P scores as the value of Y, ethics courses completed as the value of  $X_1$ , Roman Catholic as the value of  $X_2$ , Southern Baptist as the value of  $X_3$ , United Methodist as the value of  $X_4$ , Episcopalian as the value of  $X_5$ , Presbyterian as the value of  $X_6$ , American/Independent Baptist as the value of  $X_7$ , United Church of Christ/Christian Church/Fundamentalist Church/Reformed Church as the value of  $X_8$ , Unitarian/Quaker/Mennonite as the value of  $X_9$ , and no denominational membership as the value of  $X_{10}$ . The results of that linear regression analysis are included in Table 4-27.

There was a significant difference between the DIT P scores of students in some denominational classifications and the DIT P scores of students who were Jewish. The computer model indicated that Roman Catholic students averaged 15.23 points lower on their DIT P scores than Jewish students. The probability of values greater than

Table 4-27

Results for Hypothesis 8 -- Denominational Membership

Dependent Variable = DIT P Score

Source	DF	Sum of Squares	Mean Square	F Value	Prob > F
Model	10	7128.223	712.822	4.033	0.0001
Error	215	37996.871	176.730		
C Total	225	45125.094			
DEP MEAN	44.581	ROOT MSE	13.294	R-Square	0.1580
C.V.	29.820			ADJ R-SQ	0.1188
Independent Variable	DF	Parameter Estimate	Stand Error	T For H0: Parameter=0	Prob > T
Intercept	1	57.342	4.248	13.500	0.0001
Ethics	1	1.023	0.644	1.587	0.1140
Rom Catholic	1	-15.225	4.238	-3.593	0.0004
So Baptist	1	-21.482	4.944	-4.345	0.0001
U Methodist	1	-10.161	5.135	-1.979	0.0491
Episcopalian	1	-6.908	5.481	-1.260	0.2089
Presbyterian	1	-9.911	6.015	-1.648	0.1009
Am/Ind Bapt	1	-18.947	6.484	-2.922	0.0038
UCC/Xn/Fd/Ref	1	-10.476	6.428	-1.630	0.1046
Un/Quak/Menn	1	0.241	0.966	0.250	0.8032
None	1	-15.593	7.188	-2.169	0.0312

!T! for this independent variable was .0004. The computer model indicated that Southern Baptist students averaged 21.48 points lower on their DIT P scores than Jewish students. The probability of values greater than !T! for this independent variable was .0001. The computer model indicated that United Methodist students averaged 10.16 points lower on their DIT P scores than Jewish students. The probability of values greater than !T! for this independent variable was .0491. The computer model indicated that American/Independent Baptists averaged 18.95 points lower on their DIT P scores than Jewish students. The probability of values greater than !T! for this independent variable was .0038. The computer model also indicated that students who did not belong to any denomination averaged 15.59 points lower on their DIT P scores than Jewish students. The probability of values greater than !T! for this independent variable was .0312. Because there was a significant difference between the DIT P scores of students who were in the aforementioned denominational classifications and the DIT P scores of students who were Jewish, Hypothesis 8 was rejected.



### Summary of Findings

All possible comparisons of independent variables were not exhausted in the linear regression analyses performed during the course of this investigation, nor were there any analyses of possible interactions between or among independent variables. The selected comparisons were those that this researcher believed were the most important within the scope of this study. The following is a summary by hypothesis of the study findings based on those selected comparisons:

1. Hypothesis 1: There is no difference, based on the number and type of formal religious education courses completed, in the DIT P scores of college students.

Finding: There was not a significant relationship between Judeo-Christian philosophy courses completed or theology courses completed and student DIT P scores. There was a significant relationship between ethics courses completed and student DIT P scores. The computer model indicated that students had significantly higher DIT P scores for each ethics course completed. For that reason, Hypothesis 1

was rejected. However, any conclusion or implication drawn from the finding of Hypotheses 1 must include consideration of the results of the Hypothesis 2 supplemental analysis of the confounding effect of number of ethics courses completed and school type. A discussion of this confounding effect is contained in Chapter 5.

2. Hypothesis 2: After controlling for ethics courses completed, there is no difference, based on school type, in the DIT P scores of college students. Finding: There was a significant difference, based on school type, in the DIT P scores of college students. The computer model indicated that the DIT P scores of students attending divinity schools were significantly higher than the DIT P scores of students attending liberal arts colleges. For that reason, Hypothesis 2 was rejected. However, any conclusion or implication drawn from the finding of Hypotheses 2 must include consideration of the results of the Hypothesis 2 supplemental analysis of the confounding effect of number of ethics courses completed and school type. The reader is referred to Chapter 5 for a discussion of this confounding effect.

3. Hypothesis 3: After controlling for ethics courses completed, there is no difference, based on school affiliation, in the DIT P scores of college students attending the same type of school. Finding: There was not a significant difference, based on school affiliation, between the DIT P scores of students attending the Jewish affiliated college and the DIT P scores of students attending the nonaffiliated colleges. There was a significant difference between the DIT P scores of students attending the Roman Catholic affiliated college or the Southern Baptist affiliated college, and the DIT P scores of students attending the nonaffiliated colleges. There was not a significant difference, based on school affiliation, between the DIT P scores of students attending the Jewish divinity school or the United Methodist divinity school, and the DIT P scores of students attending the nonsectarian divinity school. There was a significant difference between the DIT P scores of students attending the Roman Catholic divinity schools and the DIT P scores of students attending the nonsectarian divinity school. The computer model indicated that students attending the Roman Catholic college

or the Southern Baptist college had significantly lower DIT P scores than students attending the nonaffiliated colleges. The computer model also indicated that students attending the Roman Catholic divinity schools had significantly lower DIT P scores than students attending the nonsectarian divinity school. For those reasons, Hypothesis 3 was rejected.

4. Hypothesis 4: After controlling for ethics courses completed, there is no difference, based on age, gender, year of study, grade point average, parents' annual income, familiarity with Kohlberg's moral development theory, or individual religious conversion experience, in the DIT P scores of college students. Finding: There was not a significant difference in the DIT P scores of college students based on age, grade point average, parents' annual income, familiarity with Kohlberg's moral development theory, or individual religious conversion experience. There was a significant difference in the DIT P scores of college students based on gender and year of study. The computer model indicated that males had significantly lower DIT P scores than females. The computer model also

indicated that for each completed year of study students had significantly higher DIT P scores. For those reasons, Hypothesis 4 was rejected.

5. Hypothesis 5: After controlling for ethics courses completed, there is no difference, based on mother's education level, father's education level, or student's religious ideology regarding moral decisions, in the DIT P scores of college students. Finding: There was not a significant difference between the DIT P scores of students whose mothers had completed a postbaccalaureate degree, and the DIT P scores of students whose mothers had not completed a college degree. There was a significant difference between the DIT P scores of students whose mothers had completed a baccalaureate degree, and the DIT P scores of students whose mothers had not completed a college degree. There was not a significant difference between the DIT P scores of students whose fathers had completed a baccalaureate degree, and the DIT P scores of students whose fathers had not completed a college degree. There was a significant difference between the DIT P scores of students whose fathers had completed a postbaccalaureate

degree, and the DIT P scores of students whose fathers had not completed a college degree. There was not a significant difference between the DIT P scores of students who believed they should follow the leadership of the Spirit of God in making all moral decisions, and the DIT P scores of students who believed they should follow their own moral reasoning in making all moral decisions. There was a significant difference between the DIT P scores of students who believed they should follow established religious rules and biblical commandments in making all moral decisions, and the DIT P scores of students who believed they should follow their own moral reasoning in making all moral decisions. The computer model indicated that students whose mothers had completed a baccalaureate degree had significantly higher DIT P scores than students whose mothers had not completed a college degree. The computer model indicated that students whose fathers had completed a postbaccalaureate degree had significantly higher DIT P scores than students whose fathers had not completed a college degree. The computer model also indicated that students who believed they should follow established religious rules and biblical commandments

in making all moral decisions had significantly lower DIT P scores than students who believed they should follow their own moral reasoning in making all moral decisions. For those reasons, Hypothesis 5 was rejected.

6. Hypothesis 6: After controlling for ethics courses completed, there is no difference, based on church/synagogue attendance, in the DIT P scores of college students.

Finding: There was not a significant difference between the DIT P scores of students who attended church/synagogue regularly or nonregularly, and the DIT P scores of students who never attended church/synagogue. For that reason, Hypothesis 6 was not rejected.

7. Hypothesis 7: After controlling for ethics courses completed, there is no difference, based on ethnic group, highest degree held, or source of basic moral values, in the DIT P scores of college students. Finding: There was not a significant difference between the DIT P scores of students who indicated that friends, teachers, ministers, or another specified source was the main source of their basic moral values, and the DIT P scores of students who indicated that their family was the main source of their basic moral

values. There was not a significant difference between the DIT P scores of Black, Hispanic, and Native American students and the DIT P scores of White students. There was a significant difference between the DIT P scores of Asian-American students and the DIT P scores of White students. There was not a significant difference between the DIT P scores of students who had completed an associate degree or a doctorate degree, and the DIT P scores of students who had not completed a college degree. There was a significant difference between the DIT P scores of students who had completed a baccalaureate degree or a master degree, and the DIT P scores of students who had not completed a college degree. The computer model indicated that the DIT P scores of Asian-American students were significantly lower than the DIT P scores of White students. The computer model also indicated that the DIT P scores of students who had completed a baccalaureate degree or a master degree were significantly higher than the DIT P scores of students who had not completed a college degree. For those reasons, Hypothesis 7 was rejected.



8. Hypothesis 8: After controlling for ethics courses completed, there is no difference, based on individual denominational membership, in the DIT P scores of college students. Finding: There was not a significant difference between the DIT P scores of students who were Episcopalians, Presbyterians, members of the United Church of Christ/Christian/Fundamentalist/Reformed denominations, or members of the Unitarian/Quaker/Mennonite denominations, and the DIT P scores of students who were Jewish. There was a significant difference between the DIT P scores of students who were Roman Catholics, Southern Baptists, United Methodists, American/Independent Baptists, or members of no denomination, and the DIT P scores of students who were Jewish. The computer model indicated that the DIT P scores of students who were Roman Catholics, Southern Baptists, United Methodists, American/Independent Baptists, or members of no denomination were significantly lower than the DIT P scores of students who were Jewish. For that reason, Hypothesis 8 was rejected.

## CHAPTER 5

### CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS

#### Introduction

The purpose of this study was to determine if there is a significant relationship between formal religious education and the moral judgment development of college students, and, after controlling for formal religious education, to see if there is also a significant relationship between the educational environment or certain selected student characteristics and the moral judgment development of those students. Formal religious education was defined as the study of Judeo-Christian philosophy, theology, or ethics at a fully accredited college or divinity school. Educational environment was defined as the type of school attended, and the Judeo-Christian denominational affiliation of the school. To accomplish the purpose of this study the following research questions were posed:

1. Primary research question: Is there a significant relationship between formal religious education and the moral judgment development of college students, based on the number and type of formal religious education courses completed?

2. Secondary research question: After controlling for any significantly related formal religious education courses, is there a significant relationship between the educational environment and the moral judgment development of college students?

3. Tertiary research question: After controlling for any significantly related formal religious education courses, is there a significant relationship between certain selected student characteristics and the moral judgment development of college students?

### Conclusions and Implications

Of the eight student characteristics that were related significantly to moral development, gender, ethnic group, mother's education level, and father's education level are variables not under the direct control of the

student. Highest degree held, year of study, religious ideology regarding moral decisions, and denominational membership are variables under the student's direct control. Moreover, this direct control includes selection of the type of school, the affiliation of the school, and the number of ethics courses completed; variables that also are related significantly to student moral development.

The general conclusion is that the majority of significantly related independent variables are variables that can be directly controlled by the student. The general implication is that students have substantial direct control over their own moral development. Of course with a correlational design and survey data, it cannot be determined for certain whether the significant relationships are due to increases in student moral development prompted by individual independent variables, or to pre-existent higher levels of student moral development.

The following is a discussion of the specific conclusions and implications drawn from the data analysis findings of the eight study hypotheses formulated to answer the three research questions:

1. Hypothesis 1: There is no difference, based on the number and type of formal religious education courses completed, in the DIT P scores of college students.

Finding: There was not a significant relationship between Judeo-Christian philosophy courses completed or theology courses completed and student DIT P scores. There was a significant relationship between ethics courses completed and student DIT P scores. The computer model indicated that students had significantly higher DIT P scores for each ethics course completed. For that reason, Hypothesis 1 was rejected.

The conclusion is that the completion of certain types of formal religious education courses significantly increases the moral judgment development of college students. The more ethics courses completed, the higher the individual level of moral development. The reader will recall that there was a confounding effect of number of ethics courses completed and school type, that was identified during the Hypothesis 2 data analysis. Because of this confounding effect, a supplemental analysis was performed in Phase 2 of the study, during the Hypothesis 2

analysis. This supplemental analysis indicated that there was a significant relationship between the number of ethics courses completed and the moral judgment development of students attending colleges of liberal arts and sciences. However, the supplemental analysis also indicated that the relationship between number of ethics courses completed and the moral judgment development of students attending divinity schools was not significant.

The implication is that undergraduate college students who complete college ethics courses will increase significantly in their level of moral development, making more moral judgments at the Stage 5 and Stage 6 levels on the Kohlberg moral development scale for each ethics course completed. Students probably reach a point of diminishing return, where additional ethics courses do not provide any additionally significant increase in moral development; however, that point was not determined by this study. The confounding effect that was present in this study also suggests that the effect of number of ethics courses completed is not present for divinity school students. The findings for Hypothesis 1, Hypothesis 2, and the

Hypothesis 2 supplemental analysis, suggest that students who choose to attend divinity schools are in higher levels of moral development prior to their attendance at those schools. These findings also suggest that divinity school students complete more ethics courses than liberal arts college students, although they could complete some or all of those courses at the undergraduate level prior to their attendance at the divinity school. Of the liberal arts college students used in this study 51.7% had completed no ethics courses, while only 32.7% of the divinity school students had completed no ethics courses. Of the divinity school students used in this study 30.0% had completed 1 ethics course, and 37.9% of liberal arts college students had completed 1 ethics course. Only 10.4% of liberal arts college students had completed more than 1 ethics course, while 37.3% of divinity school students had completed more than 1 ethics course. Only 6.0% of liberal arts college students had completed 2 ethics courses, while 23.6% of divinity school students had completed 2 ethics courses. Only 4.4% of liberal arts college students had completed 3 to 6 ethics courses, while 11.7% of divinity school students

had completed 3 to 6 ethics courses. No liberal arts college student had completed more than 6 ethics courses, while 1.0% of divinity school students had completed 8 ethics courses and 1.0% of divinity school students had completed 10 ethics courses.

2. Hypothesis 2: After controlling for ethics courses completed, there is no difference, based on school type, in the DIT P scores of college students. Finding: There was a significant difference, based on school type, in the DIT P scores of college students. The computer model indicated that the DIT P scores of students attending divinity schools were significantly higher than the DIT P scores of students attending liberal arts colleges. For that reason, Hypothesis 2 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, divinity school students have significantly higher levels of moral development than liberal arts college students. The discussion of the conclusion and implication for Hypothesis 1 must be considered in conjunction with this conclusion before drawing any implication for this hypothesis.



The implication is that type of school attended may significantly affect individual moral development, with divinity school students developing more rapidly and making more moral judgments at the Stage 5 and Stage 6 levels on the Kohlberg moral development scale than liberal arts college students. However, there also is the possibility that individuals who choose to attend divinity schools are more prone to be in significantly higher levels of moral development prior to making that choice. As discussed previously in the Hypothesis 1 implication, the confounding effect between the number of ethics courses completed and school type, suggests the additional possibility that college students who choose to attend divinity schools also complete more ethics courses than other college students. The finding that divinity school students had significantly higher DIT P scores than liberal arts college students was not unexpected, due to the fact that education has one of the most consistent relations to the DIT (Rest, 1986a), and the fact that nearly all of the divinity school students had completed baccalaureate degrees prior to their divinity school attendance.

3. Hypothesis 3: After controlling for ethics courses completed, there is no difference, based on school affiliation, in the DIT P scores of college students attending the same type of school. Finding: There was not a significant difference, based on school affiliation, between the DIT P scores of students attending the Jewish affiliated college and the DIT P scores of students attending the nonaffiliated colleges. There was a significant difference between the DIT P scores of students attending the Roman Catholic affiliated college or the Southern Baptist affiliated college, and the DIT P scores of students attending the nonaffiliated colleges. There was not a significant difference, based on school affiliation, between the DIT P scores of students attending the Jewish divinity school or the United Methodist divinity school and the DIT P scores of students attending the nonsectarian divinity school. There was a significant difference between the DIT P scores of students attending the Roman Catholic divinity schools and the DIT P scores of students attending the nonsectarian divinity school. The computer model indicated that students attending the Roman Catholic college

or the Southern Baptist college had significantly lower DIT P scores than students attending the nonaffiliated colleges. The computer model also indicated that students attending the Roman Catholic divinity schools had significantly lower DIT P scores than students attending the nonsectarian divinity school. For those reasons, Hypothesis 3 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, students attending Roman Catholic colleges and Southern Baptist colleges have significantly lower levels of moral development than students attending Jewish and religiously nonaffiliated colleges. In addition, even after controlling for the number of ethics courses completed, students attending Roman Catholic divinity schools have significantly lower levels of moral development than students attending nonsectarian divinity schools.

The implication is that school affiliation may significantly affect individual moral development, with students who are attending nonaffiliated colleges and nonsectarian divinity schools developing more rapidly and

making more decisions at the Kohlberg Stage 5 and Stage 6 levels of moral development than students who are attending Roman Catholic colleges, Southern Baptist colleges, and Roman Catholic divinity schools. However, there also is the possibility that individuals who are at the lower stages of development on Kohlberg's moral development scale are more prone to select Roman Catholic colleges, Southern Baptist colleges, and Roman Catholic divinity schools; whereas, those who are at the higher stages of development are more prone to select nonaffiliated colleges and nonsectarian divinity schools. This selection may be due, at least in part, to individual denominational membership, which also was significantly related to individual moral development. Denominational membership will be discussed later.

4. Hypothesis 4: After controlling for ethics courses completed, there is no difference, based on age, gender, ✓  
year of study, grade point average, parents' annual income, familiarity with Kohlberg's moral development theory, or individual religious conversion experience, in the DIT P scores of college students. Finding: There was not a significant difference in the DIT P scores of college

students based on age, grade point average, parents' annual income, familiarity with Kohlberg's moral development theory, or individual religious conversion experience. There was a significant difference in the DIT P scores of college students based on gender and year of study. The computer model indicated that males had significantly lower DIT P scores than females. The computer model also indicated that for each completed year of study students had significantly higher DIT P scores. For those reasons, Hypothesis 4 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, female college students have significantly higher levels of moral development than male college students. Furthermore, even after controlling for the number of ethics courses completed, college students have significantly higher levels of moral development for each additional year of college education completed.

The implication is that gender may significantly affect the moral development of students, with females developing more rapidly and making significantly more moral

judgments at Kohlberg's Stage 5 and Stage 6 levels than males; and that each year of college education significantly increases the moral development of students, and the number of moral judgments they make at Kohlberg's Stage 5 and Stage 6 levels. However, as Rest (1986a) suggested, there also is the possibility that significant differences in male/female DIT P scores are due to intelligence quotients, education, or socio-economic status. The gender differences were unexpected because Rest (1979) listed only 2 of 22 studies that reported significant male/female differences, Rest (1986b) said gender differences with regard to moral development are trivial, and Gilligan (1982) said that Kohlberg style justice oriented moral judgment scoring systems downgrade women and make women's moral development appear inferior to men's. With regard to year of study, the finding was not unexpected, because Rest (1986a) indicated that education has one of the most consistent relations to the DIT, and just receiving more education of any kind at the college level significantly increases DIT P scores.

5. Hypothesis 5: After controlling for ethics courses completed, there is no difference, based on mother's

education level, father's education level, or student's religious ideology regarding moral decisions, in the DIT P scores of college students. Finding: There was not a significant difference between the DIT P scores of students whose mothers had completed a postbaccalaureate degree, and the DIT P scores of students whose mothers had not completed a college degree. There was a significant difference between the DIT P scores of students whose mothers had completed a baccalaureate degree, and the DIT P scores of students whose mothers had not completed a college degree. There was not a significant difference between the DIT P scores of students whose fathers had completed a baccalaureate degree, and the DIT P scores of students whose fathers had not completed a college degree. There was a significant difference between the DIT P scores of students whose fathers had completed a postbaccalaureate degree, and the DIT P scores of students whose fathers had not completed a college degree. There was not a significant difference between the DIT P scores of students who believed they should follow the leadership of the Spirit of God in making all moral decisions, and the DIT P scores of students who

believed they should follow their own moral reasoning in making all moral decisions. There was a significant difference between the DIT P scores of students who believed they should follow established religious rules and biblical commandments in making all moral decisions, and the DIT P scores of students who believed they should follow their own moral reasoning in making all moral decisions. The computer model indicated that students whose mothers had completed a baccalaureate degree had significantly higher DIT P scores than students whose mothers had not completed a college degree. The computer model indicated that students whose fathers had completed a postbaccalaureate degree had significantly higher DIT P scores than students whose fathers had not completed a college degree. The computer model also indicated that students who believed they should follow established religious rules and biblical commandments in making all moral decisions had significantly lower DIT P scores than students who believed they should follow their own moral reasoning in making all moral decisions. For those reasons, Hypothesis 5 was rejected.



The conclusion is that, even after controlling for the number of ethics courses completed, students whose mothers have completed a baccalaureate degree have significantly higher levels of moral development than students whose mothers do not have a college degree. In addition, even after controlling for the number of ethics courses completed, students whose fathers have completed a postbaccalaureate degree have significantly higher levels of moral development than students whose fathers do not have a college degree. Moreover, even after controlling for the number of ethics courses completed, students who believe they should follow established religious rules and biblical commandments in making all moral decisions have significantly lower levels of moral development than students who believe they should follow their own moral reasoning in making all moral decisions.

The implication is that mothers with baccalaureate degrees and fathers with postbaccalaureate degrees help to increase their children's level of moral development, in some way contributing significantly to their children's movement into the Kohlberg Stage 5 and Stage 6 levels of

moral development; and that religious ideology significantly affects individual moral development, with students who hold the ideology of following their own moral reasoning developing more rapidly and making more moral decisions at the Kohlberg Stage 5 and Stage 6 levels than students who hold the ideology of following established religious rules and biblical commandments. With regard to mother's and father's education level, it is reasonable to expect that if college education increases moral development, college educated parents will teach higher moral values to their children and assist in moving them into a higher level of moral development than that of their peers whose parents are not college educated. It also is reasonable to expect that those students who feel they should follow established religious rules and biblical commandments in making all moral decisions would not choose Kohlberg Stage 5 and Stage 6 responses, since the lower stage answers would fit their religious ideology more closely with regard to moral decisions. In addition, as Rest (1986b) indicated, their religious ideology also would tend to retard their movement into Kohlberg's higher stages of moral development.

6. Hypothesis 6: After controlling for ethics courses completed, there is no difference, based on church/synagogue attendance, in the DIT P scores of college students.

Finding: There was not a significant difference between the DIT P scores of students who attended church/synagogue regularly or nonregularly, and the DIT P scores of students who never attended church/synagogue. For that reason, Hypothesis 6 was not rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, church/synagogue attendance does not have a significant relationship to the moral development of college students. Moreover, nonattendance at church/synagogue does not have a significant relationship to the moral development of college students.

The implication is that church/synagogue attendance or nonattendance does not significantly affect the moral development of college students, and the number of moral judgments they make at the Stage 5 and Stage 6 levels on the Kohlberg scale. This suggests that either ethics are not being taught effectively at churches and synagogues, or

students attending churches and synagogues are not learning anything that would cause their moral development to be different from students who are not attending.

7. Hypothesis 7: After controlling for ethics courses completed, there is no difference, based on ethnic group, highest degree held, or source of basic moral values, in the DIT P scores of college students. Finding: There was not a significant difference between the DIT P scores of students who indicated that friends, teachers, ministers, or another specified source was the main source of their basic moral values, and the DIT P scores of students who indicated their family was the main source of their basic moral values. There was not a significant difference between the DIT P scores of Black, Hispanic, and Native American students and the DIT P scores of White students. There was a significant difference between the DIT P scores of Asian-American students and the DIT P scores of White students. There was not a significant difference between the DIT P scores of students who had completed an associate degree or a doctorate degree, and the DIT P scores of students who had not completed a college degree. There was a significant

difference between the DIT P scores of students who had completed a baccalaureate degree or a master degree, and the DIT P scores of students who had not completed a college degree. The computer model indicated that the DIT P scores of Asian-American students were significantly lower than the DIT P scores of White students. The computer model also indicated that the DIT P scores of students who had completed a baccalaureate degree or a master degree were significantly higher than the DIT P scores of students who had not completed a college degree. For those reasons, Hypothesis 7 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, Asian-American students have significantly lower levels of moral development than White students. Even after controlling for the number of ethics courses completed, individuals who have completed baccalaureate degrees and master degrees have significantly higher levels of moral development than those who have not completed a college degree.

The implication is that the Asian-American culture significantly affects individual moral development, and/or

follows a different moral standard than the White-American culture, with Asian-American students making less moral judgments at the Stage 5 and Stage 6 levels on Kohlberg's moral development scale than White students. Moreover, the amount of higher education completed, from the bachelor's level through the master's level, significantly affects individual moral development, increasing the number of moral judgments made at the Stage 5 and Stage 6 levels on Kohlberg's moral development scale; whereas, education below or above those levels does not significantly affect moral judgment development. The nonsignificance at the doctorate level could be due to the fact that there was only one respondent in that category, though it does merit further investigation.

8. Hypothesis 8: After controlling for ethics courses completed, there is no difference, based on individual denominational membership, in the DIT P scores of college students. Finding: There was not a significant difference between the DIT P scores of students who were Episcopalians, Presbyterians, members of the United Church of Christ/Christian/Fundamentalist/Reformed denominations, or members

of the Unitarian/Quaker/Mennonite denominations, and the DIT P scores of students who were Jewish. There was a significant difference between the DIT P scores of students who were Roman Catholics, Southern Baptists, United Methodists, American/Independent Baptists, or members of no denomination, and the DIT P scores of students who were Jewish. The computer model indicated that the DIT P scores of students who were Roman Catholics, Southern Baptists, United Methodists, American/Independent Baptists, or members of no denomination were significantly lower than the DIT P scores of students who were Jewish. For that reason, Hypothesis 8 was rejected.

The conclusion is that, even after controlling for the number of ethics courses completed, Roman Catholics, Southern Baptists, United Methodists, American/Independent Baptists, and individuals claiming no denominational membership have significantly lower levels of moral development than Jewish individuals.

The implication is that denominational membership significantly affects individual moral development, with Jewish students developing more rapidly and making more

moral judgments at the Kohlberg Stage 5 and Stage 6 levels of moral development than Roman Catholic, Southern Baptist, United Methodist, or American/Independent Baptist students. This significant difference in moral development could be due to the more conservative teachings of particular Christian denominations, or the multifarious nature of the Jewish religion, or a combination of both.

#### Suggested Future Studies

In order to reinforce the findings of this study and seek answers to the questions raised by those findings, the following studies are suggested for future investigation:

Formal religious education replication study. This researcher is not aware of any other study that has examined the relationship of DIT P scores to such a wide array of ethics courses, taught in so many diverse higher education environments. Therefore, another study seeking to replicate the findings of this study is essential to the reinforcement of this researcher's conclusions and recommendations.

Behavioral change study. Although, theoretically, changes in individual moral beliefs also result in changes



in individual ethical behavior; realistically, that is not always what occurs. The question that remains unanswered by this study is whether this increase in individual moral judgment development, which is significantly related to ethics courses completed at the college level, also results in significant changes in individual ethical behavior, once the ethics courses are completed. As indicated by Rest (1986b) the development of an acceptable means of measuring ethical behavioral changes will be a very difficult task. However, it should not be an impossible one. This is certainly an area that needs to be investigated by future studies.

Gender differences study. A study to determine the reason why the DIT P scores of females were significantly higher than those of males, even after controlling for the number of ethics courses completed, is another area for future exploration. Rest (1986a) suggested that when gender differences do occur the influence of IQ, education, or SES should be checked. Are the DIT P score differences in this study, as Rest suggests, due to intelligence quotients, education, or socio-economic status? Are the differences

just peculiar to this particular study, do they mean females learn more rapidly than males, or do they mean females change their opinions more rapidly than males? These are questions that merit exploration in future research studies, especially when considering the claims made by Gilligan (1982), and the fact that significant male/female differences were present in a study reported by Shaver (1985) and two earlier studies reported by Rest (1979).

Ethnic differences study. A study to determine the reason why Asian-American students had significantly lower DIT P scores than White-American students is another area for future investigation. Is this phenomenon caused by the Asian-American culture, the structure of the DIT, the ability of the individual student, or some other variable?

Parent education effect study. A study to determine the reason why students whose mothers had a baccalaureate degree, or whose fathers had a postbaccalaureate degree, had significantly higher DIT P scores than students whose parents did not have a college degree is another area for future exploration. The study should also examine the

reason why students whose fathers had a baccalaureate degree, or whose mothers had a postbaccalaureate degree, did not have significantly higher DIT P scores than students whose parents did not have a college degree. Is this difference affected by the major field of study for the parent's degree, the demands of the parent's career, the ethical example of the parent, or some other variable?

Degree completion effect study. Finally, a study to determine the reason why there was not a significant difference between the DIT P scores of college students who had completed associate degrees or doctorate degrees, and the DIT P scores of students who had not completed any college degree is another area for future investigation. Did the lack of significant difference occur because of some individual student characteristic, because of the particular institution attended by the student, or because of some other variable?

#### Recommendations

This study indicates that the early founders of American colleges were correct in including moral philosophy

courses as a required part of college curricula. Moreover, this study also strongly supports the contention by Bok (1988) that all colleges ought to include more ethics courses as part of the core curriculum in each discipline, and practical discussions of ethical issues in the other classes taught in each particular discipline. According to Bok, college presidents, deans, and faculty need to fulfill their responsibility, to both students and higher education, by ensuring that more ethics courses and more ethical discussions are incorporated into college curricula.

In consideration of the reasoned argument of Bok (1988), and because of the findings of this study, the following recommendations are made:

1. Each institution of higher education should include a general ethics course as part of the required core curriculum in each major discipline.

2. Each department, at each institution of higher education, should include at least one applied ethics course as a required part of the curriculum in that major field, and specifically designed to explore ethical issues in that major.

3. Discussions of ethical issues should be incorporated into as many nonethics courses as practical, within all major fields of study, at each institution of higher education.

4. All students should take full responsibility for those independent variables that were identified as significantly related to their moral development and under their direct control.

It is reasonable to expect that the increase in individual moral development related to the study of ethics at the college level would have direct relevance to each major career field, in a number of areas. Moreover, it also is reasonable to expect that the implementation of these four recommendations would be beneficial to both college students and society at large, during the students' college years and upon their entry into the career work force following graduation. Therefore, the presidents, faculty, and students of all institutions of higher education should duly consider the content of this study, and begin now to hear the voices of prominent higher education leaders like Derek Bok.

APPENDIX A  
PARTICIPATION SOLICITATION LETTER

President  
Name of Institution  
Anywhere, USA

Dear Sir:

I am conducting a PhD research study in conjunction with Dr James Wattenbarger, Director of the University of Florida Institute of Higher Education, to investigate the relationship of formal religious education, as taught in various theology, philosophy, and ethics courses, to the moral judgment development of college students.

We have decided to obtain part of the study sample from students attending colleges and seminaries affiliated with major Judeo-Christian denominations in the United States, and part of the sample from students attending colleges and seminaries that are not so affiliated. We have also decided to use the internationally recognized Defining Issues Test, developed by Dr James Rest, Director of the University of Minnesota Center for the Study of Ethical Development, as the measurement instrument for moral judgment development.

I am writing to ask if you would be willing to have a member of your staff distribute a packet of research material to each of (INSERT 50 OR 100 DEPENDING ON SIZE OF SCHOOL) students randomly selected from those currently enrolled at your institution. The time required for completion of the packet is thirty to forty-five minutes.

Individual names and institutional names will not be identified in the study, and copies of the results of the study will be provided to you upon request.

Thank you for your attention and cooperation in the completion of this important research. Questions may be directed to me at (MY TELEPHONE NUMBER).

Sincerely,

Gary G. Friend, Sr

APPENDIX B  
SURVEY COVER LETTER



Institute of Higher Education  
University of Florida

Dear Research Participant:

You have been selected by (NAME OF COLLEGE OR DIVINITY SCHOOL) to participate in an important research study being conducted at the University of Florida Institute of Higher Education. This study is designed to investigate the relationship of formal religious education to the moral judgment development of college and seminary students.

Attached is a questionnaire, which I am asking you to complete. This will require approximately thirty to forty-five minutes of your time; however, your input will provide invaluable information vital to the completion of this research.

ALTHOUGH THIS IS NOT A TEST, IT IS IMPORTANT FOR THE STUDY FINDINGS THAT THE OPINIONS GIVEN ARE SOLELY YOUR OWN. CONSIDER EACH ITEM CAREFULLY, BUT ALSO PACE YOURSELF SO THAT YOU FINISH IN NO MORE THAN ONE HOUR.

PLEASE FOLLOW THE INSTRUCTIONS CONTAINED ON THE QUESTIONNAIRE, COMPLETE IT IMMEDIATELY, SEAL IT IN THE ENCLOSED ENVELOPE, SIGN AND DATE THE ENVELOPE WHERE INDICATED, AND IMMEDIATELY RETURN IT TO (Name of Contact Person).

INDIVIDUAL NAMES AND NAMES OF INSTITUTIONS WILL NOT BE USED IN REPORTING THE RESULTS OF THE STUDY. Names are used on the questionnaire for control purposes only. The results of the study will be made available to you upon request through the President of your (INSERT THE WORD COLLEGE OR SEMINARY AS APPROPRIATE) when the research is completed.

Thank you for your attention and cooperation.

Sincerely,

Gary G. Friend, Sr

APPENDIX C  
RESEARCH QUESTIONNAIRE

ID NUMBER \_\_\_\_\_

BACKGROUND PORTION

Q1

PLEASE GIVE US THE FOLLOWING BACKGROUND INFORMATION:

1. Name: \_\_\_\_\_ Age: \_\_\_\_\_
2. Gender: \_\_\_\_\_ Male \_\_\_\_\_ Female
3. Ethnic Group: ☐ Asian-American ☐ Black ☐ Hispanic  
☐ Native American ☐ White
4. Degrees Held: ☐ Associate ☐ Bachelor ☐ Master ☐ PhD/EdD
5. Yr of Study: ☐ Freshman ☐ Junior ☐ Grad Stu(Masters)  
☐ Sophomore ☐ Senior ☐ Grad Stu(PhD/EdD)
6. GPA: \_\_\_\_\_ (Using 4 point scale e.g. 3.5, 2.8)
7. Parents' Annual Income: \_\_\_\_\_ (e.g. \$45,000)
8. Parent's Education Level:
  - a. Mother: ☐ High Sch Grad ☐ Coll Grad ☐ Post Grad Degree
  - b. Father: ☐ High Sch Grad ☐ Coll Grad ☐ Post Grad Degree
9. Moral Development Courses Taken (Number of each, e.g. 1,6,2):  
☐ Judeo-Christian Philosophy  
☐ Theology  
☐ Ethics
10. I am familiar with the moral development theory of Lawrence Kohlberg: ☐ Yes ☐ No
11. Religious Experience:
  - a. I have experienced religious conversion: ☐ Yes ☐ No

- b. I have the following pattern of church/synagogue attendance

\_\_\_ I go to church/synagogue regularly seeking values or direction for my life.  
 \_\_\_ I go to church/synagogue regularly out of duty or habit.  
 \_\_\_ I do not go to church/synagogue regularly.  
 \_\_\_ I do not go to church/synagogue at all.

12. Religious Ideology:

\_\_\_ I believe I should follow established religious rules and biblical commandments in making all moral decisions.  
 \_\_\_ I believe I should follow my own moral reasoning in making all moral decisions.  
 \_\_\_ I believe I should follow the leadership of the Spirit of God in making all moral decisions.

13. My basic moral values came mainly from:

\_\_\_ Family \_\_\_ Friends \_\_\_ Teachers \_\_\_ Ministers  
 \_\_\_ Others(Specify:\_\_\_\_\_)

14. Denominational Membership(Specify):\_\_\_\_\_

(e.g. Southern Baptist, Jewish, Catholic, Methodist, None)

NOTE: THIS QUESTIONNAIRE WAS PRODUCED ON ONLY ONE PAGE, NOT TWO AS SHOWN HERE. THE COPY SHOWN IS THE COLLEGE VERSION. THE SEMINARY VERSION WAS THE SAME WITH THE EXCEPTION OF QUESTION FIVE, WHICH READ AS INDICATED BELOW.

5. Yr of Study:

\_\_\_ Seminary Yr1 \_\_\_ Seminary Yr3 \_\_\_ Grad Stu(Masters)  
 \_\_\_ Seminary Yr2 \_\_\_ Seminary (DMin) \_\_\_ Grad Stu(PhD)

APPENDIX D  
DEFINING ISSUES TEST

## OPINIONS ABOUT SOCIAL PROBLEMS

This portion of the questionnaire is aimed at understanding how people think about social problems. Different people often have different opinions about questions of right and wrong. There are no "right" answers in the way that there are right answers to math problems. We would like you to tell us what you think about several problem stories. The papers will be fed to a computer to find the average for the whole group, and no one will see your individual answers.

\*\*\*\*\*

In this questionnaire you will be asked to give your opinions about several stories. Here is a story as an example.

Frank Jones has been thinking about buying a car. He is married, has two small children and earns an average income. The car he buys will be his family's only car. It will be used mostly to get to work and drive around town, but sometimes for vacation trips also. In trying to decide what car to buy, Frank Jones realized that there were a lot of questions to consider. Below there is a list of some of these questions.

If you were Frank Jones, how important would each of these questions be in deciding what car to buy?

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NOTE: THE DIT IS REPRINTED WITH PERMISSION OF THE PUBLISHER.  
EACH DIT PROBLEM STORY SENT TO STUDENTS WAS PRODUCED  
ON ONLY ONE PAGE, NOT TWO AS SHOWN HERE.

Instructions for Part A: (Sample Question)    Q3

On the left hand side check one of the spaces by each statement of a consideration. (For instance, if you think that statement #1 is not important in making a decision about buying a car, check the space on the right.)

IMPORTANCE:

Great   Much   Some   Little   No

				X	1. Whether the car dealer was in the same block as where Frank lives. (Note that in the sample, the person taking the questionnaire did not think this was important in making a decision.)
X					2. Would a <u>used</u> car be more economical in the long run than a <u>new</u> car. (Note that a check was put in the far left space to indicate the opinion that this is an important issue in making a decision about buying a car.)
		X			3. Whether the color was green, Frank's favorite color.
				X	4. Whether the cubic inch displacement was at least 200. (Note that if you are unsure about what "cubic inch displacement" means, then mark it "no importance.")
X					5. Would a large, roomy car be better than a compact car.
				X	6. Whether the front connibilities were differential. (Note that if a statement sounds like gibberish or nonsense to you, mark it "no importance.")

Instructions for Part B: (Sample Question)

From the list of questions above, select the most important one of the whole group. Put the number of the most important question on the top line below. Do likewise for your 2nd, 3rd and 4th most important choices. (Note that the top choices in this case will come from the statements that were checked on the far left-hand side - statements #2 and #5 were thought to be very important. In deciding what is the most important, a person would re-read #2 and #5, and then pick one of them as the most important, then put the other one as "second most important," and so on.)

Most important 5Second most important 2Third most important 3Fourth most important 1



## HEINZ AND THE DRUG

Q4

In Europe a woman was near death from a special kind of cancer. There was one drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid \$200 for the radium and charged \$2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about \$1,000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife.

Should Heinz steal the drug? (Check one)

     Should steal it         Can't decide         Should not steal it

IMPORTANCE:

Great   Much   Some   Little   No

<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	1. Whether a community's laws are going to be upheld.
<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	2. Isn't it only natural for a loving husband to care so much for his wife that he'd steal?
<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?
<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	4. Whether Heinz is a professional wrestler, or has considerable influence with professional wrestlers.
<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>	5. Whether Heinz is stealing for himself or doing this solely to help someone else.

					6. Whether the druggist's rights to his invention have to be respected.
					7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.
					8. What values are going to be the basis for governing how people act towards each other.
					9. Whether the druggist is going to be allowed to hide behind a worthless law which only protects the rich anyhow.
					10. Whether the law in this case is getting in the way of the most basic claims of any member of society.
					11. Whether the druggist deserves to be robbed for being so greedy and cruel.
					12. Would stealing in such a case bring about more total good for the whole society or not?

From the list of questions above, select the four most important:

Most important\_\_\_\_\_

Second most important\_\_\_\_\_

Third most important\_\_\_\_\_

Fourth most important\_\_\_\_\_

## STUDENT TAKE-OVER

05

At Harvard University a group of students, called the Students for a Democratic Society (SDS), believe that the University should not have an army ROTC program. SDS students are against the war in Viet Nam, and the army training program helps send men to fight in Viet Nam. The SDS students demanded that Harvard end the army ROTC training program as a university course. This would mean that Harvard students could not get army training as part of their regular course work and not get credit for it towards their degrees. Agreeing with the SDS students, the Harvard professors voted to end the ROTC program as a university course. But the President of the University stated that he wanted to keep the army program on campus as a course. The SDS students felt that the President was not going to pay attention to the faculty vote or to their demands. So, one day last April, two hundred SDS students walked into the university's administration building, and told everyone else to get out. They said they were doing this to force Harvard to get rid of the army training program as a course.

Should the students have taken over the administration building? (Check one)

Yes, they should take it over.      Can't decide.      No, they shouldn't take it over.

**IMPORTANCE:**

Great Much Some Little No

						1. Are the students doing this to really help other people or are they doing it just for kicks?
						2. Do the students have any right to take over property that doesn't belong to them?
						3. Do the students realize that they might be arrested and fined, and even expelled from school?

					4. Would taking over the building in the long run benefit more people to a greater extent?
					5. Whether the president stayed within the limits of his authority in ignoring the faculty vote.
					6. Will the takeover anger the public and give all students a bad name?
					7. Is taking over a building consistent with principles of justice?
					8. Would allowing one student take-over encourage many other student take-overs?
					9. Did the president bring this misunderstanding on himself by being so unreasonable and uncooperative?
					10. Whether running the university ought to be in the hands of a few administrators or in the hands of all the people.
					11. Are the students following principles which they believe are above the law?
					12. Whether or not university decisions ought to be respected by students.

From the list of questions above, select the four most important:

Most important\_\_\_\_\_

Second most important\_\_\_\_\_

Third most important\_\_\_\_\_

Fourth most important\_\_\_\_\_

## ESCAPED PRISONER

Q6

A man had been sentenced to prison for 10 years. After one year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For 8 years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his own profits to charity. Then one day, Mrs. Jones, an old neighbor, recognized him as the man who had escaped from prison 8 years before, and whom the police had been looking for.

Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison? (Check one)

☐ Should report him ☐ Can't decide ☐ Should not report him

IMPORTANCE:

Great Much Some Little No

					1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
					2. Every time someone escapes punishment for a crime, doesn't that just encourage more crime?
					3. Wouldn't we be better off without prisons and the oppression of our legal systems?
					4. Has Mr. Thompson really paid his debt to society?
					5. Would society be failing what Mr. Thompson should fairly expect?
					6. What benefits would prisons be apart from society, especially for a charitable man?
					7. How could anyone be so cruel and heartless as to send Mr. Thompson to prison?

						8. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?
						9. Was Mrs. Jones a good friend of Mr. Thompson?
						10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
						11. How would the will of the people and the public good best be served?
						12. Would going to prison do any good for Mr. Thompson or protect anybody?

From the list of questions above, select the four most important:

Most important\_\_\_\_\_

Second most important\_\_\_\_\_

Third most important\_\_\_\_\_

Fourth most important\_\_\_\_\_

## THE DOCTOR'S DILEMMA

Q7

A lady was dying of cancer which could not be cured and she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of pain-killer like morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough morphine to kill her. She said she couldn't stand the pain and that she was going to die in a few months anyway.

What should the doctor do? (Check one)

☐ He should give the lady an overdose that will make her die.      ☐ Can't decide      ☐ Should not give the overdose.

IMPORTANCE:

Great Much Some Little No

					1. Whether the woman's family is in favor of giving her the overdose or not.
					2. Is the doctor obligated by the same laws as everybody else if giving her an overdose would be the same as killing her?
					3. Whether people would be much better off without society regimenting their lives and even their deaths.
					4. Whether the doctor could make it appear like an accident.
					5. Does the state have the right to force continued existence on those who don't want to live?
					6. What is the value of death prior to society's perspective on personal values?

					7. Whether the doctor has sympathy for the woman's suffering or cares more about what society might think.
					8. Is helping to end another's life ever a responsible act of cooperation?
					9. Whether only God should decide when a person's life should end.
					10. What values the doctor has set for himself in his own personal code of behavior.
					11. Can society afford to let everybody end their lives when they want to?
					12. Can society allow suicides or mercy killing and still protect the lives of individuals who want to live?

From the list of questions above, select the four most important:

Most important\_\_\_\_\_

Second most important\_\_\_\_\_

Third most important\_\_\_\_\_

Fourth most important\_\_\_\_\_



## WEBSTER

Q8

Mr. Webster was the owner and manager of a gas station. He wanted to hire another mechanic to help him, but good mechanics were hard to find. The only person he found who seemed to be a good mechanic was Mr. Lee, but he was Chinese. While Mr. Webster himself didn't have anything against Orientals, he was afraid to hire Mr. Lee because many of his customers didn't like Orientals. His customers might take their business elsewhere if Mr. Lee was working in the gas station. When Mr. Lee asked Mr. Webster if he could have the job, Mr. Webster said that he had already hired somebody else. But Mr. Webster really had not hired anybody, because he could not find anybody who was a good mechanic besides Mr. Lee.

What should Mr. Webster have done? (Check one)

☐ Should have hired Mr. Lee     
 ☐ Can't decide     
 ☐ Should not have hired him

**IMPORTANCE:**

Great Much Some Little No

						1. Does the owner of a business have the right to make his own business decisions or not?
						2. Whether there is a law that forbids racial discrimination in hiring for jobs.
						3. Whether Mr. Webster is prejudiced against orientals himself or whether he means nothing personal in refusing the job.
						4. Whether hiring a good mechanic or paying attention to his customers' wishes would be best for his business.

					5. What individual differences ought to be relevant in deciding how society's roles are filled?
					6. Whether the greedy and competitive capitalistic system ought to be completely abandoned.
					7. Do a majority of people in Mr. Webster's society feel like his customers or are a majority against prejudice?
					8. Whether hiring capable men like Mr. Lee would use talents that would otherwise be lost to society.
					9. Would refusing the job to Mr. Lee be consistent with Mr. Webster's own moral beliefs?
					10. Could Mr. Webster be so hard-hearted as to refuse the job, knowing how much it means to Mr. Lee?
					11. Whether the Christian commandment to love your fellow man applies in this case.
					12. If someone's in need, shouldn't he be helped regardless of what you get back from him?

From the list of questions above, select the four most important:

Most important\_\_\_\_\_

Second most important\_\_\_\_\_

Third most important\_\_\_\_\_

Fourth most important\_\_\_\_\_

## NEWSPAPER

Q9

Fred, a senior in high school, wanted to publish a mimeographed newspaper for students so that he could express many of his opinions. He wanted to speak out against the war in Viet Nam and to speak out against some of the school's rules, like the rule forbidding boys to wear long hair. When Fred started his newspaper, he asked his principal for permission. The principal said it would be all right if before every publication Fred would turn in all his articles for the principal's approval. Fred agreed and turned in several articles for approval. The principal approved all of them and Fred published two issues of the paper in the next two weeks. But the principal had not expected that Fred's newspaper would receive so much attention. Students were so excited by the paper that they began to organize protests against the hair regulation and other school rules. Angry parents objected to Fred's opinions. They phoned the principal telling him that the newspaper was unpatriotic and should not be published. As a result of the rising excitement, the principal ordered Fred to stop publishing. He gave as a reason that Fred's activities were disruptive to the operation of the school.

Should the principal stop the newspaper? (Check one)

☐ Should stop it      ☐ Can't decide      ☐ Should not stop it

IMPORTANCE:

Great   Much   Some   Little   No

					1. Is the principal more responsible to students or to parents?
					2. Did the principal give his word that the newspaper could be published for a long time, or did he just promise to approve the newspaper one issue at a time?
					3. Would the students start protesting even more if the principal stopped the newspaper?

					4. When the welfare of the school is threatened, does the principal have the right to give orders to students?
					5. Does the principal have the freedom of speech to say "no" in this case?
					6. If the principal stopped the newspaper would he be preventing full discussion of important problems?
					7. Whether the principal's order would make Fred lose faith in the principal.
					8. Whether Fred was really loyal to his school and patriotic to his country.
					9. What effect would stopping the paper have on the student's education in critical thinking and judgments?
					10. Whether Fred was in any way violating the rights of others in publishing his own opinions.
					11. Whether the principal should be influenced by some angry parents when it is the principal that knows best what is going on in the school.
					12. Whether Fred was using the newspaper to stir up hatred and discontent.

From the list of questions above, select the four most important:

Most important \_\_\_\_\_

Second most important \_\_\_\_\_

Third most important \_\_\_\_\_

Fourth most important \_\_\_\_\_

APPENDIX E  
DISTRIBUTION LETTER

John Doe, Contact Person  
Name of Institution  
Anywhere, USA

Dear John Doe:

In response to President (INSERT NAME) letter, I am providing packets for distribution to (INSERT 50 OR 100) students from your (INSERT COLLEGE OR SEMINARY).

Some institutions have chosen to have selected professors distribute the packets to a random selection of students to be filled out immediately, since it only requires thirty to forty-five minutes for completion. Using this method, the professors would collect the completed materials and return them to your office for bulk return to me. This assures an excellent return rate, and is the preferred method.

On the other hand, some colleges have chosen to distribute the packets from a contact person to a random selection of students, who then return the completed packets to the same person for bulk return to me. Although this provides less assurance of return, it is also an acceptable method.

You may use whichever method best suits your situation. The cover letter on each packet asks each student to complete the questionnaire, place it in the envelope provided, seal it, and return it to your office for bulk return to me in the same box I sent to you. I have provided a postage paid return mailing label for this purpose.

I cannot express to you enough appreciation for what you are doing to assist me. If you have any questions feel free to contact me at (MY TELEPHONE NUMBER).

Sincerely,

Gary G. Friend, Sr

APPENDIX F  
FIRST FOLLOW-UP LETTER

John Doe, Contact Person  
Participating College or Divinity School  
Anywhere, USA

Dear John Doe:

This letter is a follow-up to the box of research questionnaires I sent you in (MONTH OF DISPATCH). I want to ensure that the questionnaires arrived at your office for distribution, and that the completed questionnaires have not been lost in the mail during their return to me.

My experience indicates that individuals who complete the questionnaires will return them within four weeks. If it has been that long since the last packet was handed out, I doubt there will be any more returns, and you may ship me the completed questionnaires that have been returned to you.

Thank you for your assistance.

Sincerely,

Gary G. Friend, Sr.



APPENDIX G  
SECOND FOLLOW-UP LETTER

John Doe, Contact Person  
Participating College or Divinity School  
Anywhere, USA

Dear John Doe:

This letter is a follow-up to the letter I sent you on (DATE OF FOLLOW-UP LETTER). I want to ensure that you have mailed the completed questionnaires and that they have not been lost in the mail during their return to me.

Please feel free to contact me at (MY TELEPHONE NUMBER) if you have any questions regarding the return of the completed questionnaires.

Thank you for your assistance.

Sincerely,

Gary G. Friend, Sr

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## BIOGRAPHICAL SKETCH

Gary Gene Friend was born in Cumberland, Maryland, the son of Weston Webster and Virginia Eloise Friend of Swanton, Maryland. After graduation from Southern High School in Oakland, Maryland, he completed an Associate in Arts degree at Potomac State College in Keyser, West Virginia, concentrating his study in English and world history. He then completed a Bachelor of Arts degree at the University of West Virginia in Morgantown, West Virginia, concentrating his study in world history and political science.

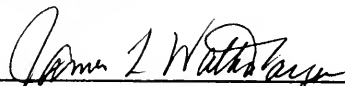
Upon graduation from the university, he began his service as a U.S. Army commissioned officer in the 101st Airborne Division. He completed Airborne and Ranger training, married Jacquelyn Dawn Warnick, and later served as an Infantry Platoon Leader and Air Operations Officer with the 25th Infantry Division in Viet Nam. When he returned from the war, he was assigned to the U.S. Army Adjutant General's Office in Washington, D.C. After

leaving that office he completed a Master of Business Administration degree at George Washington University, in Washington, D.C., concentrating his study in business management and data processing. Following his graduation from that university, he served as the Director of Customer Support in the Information Systems Office of the U.S. Army Surgeon General's Office in Washington, D.C.; as the Deputy Director of the Data Systems Directorate at the National Cancer Center and Fort Detrick in Frederick, Maryland; and as the Director of Management Information Systems at Fitzsimons Medical Center in Denver, Colorado.


He resigned from the military to complete a Master of Divinity degree at The Southern Baptist Theological Seminary in Louisville, Kentucky, concentrating his study in counseling psychology, theology, and world religions. He then returned to active duty in the U.S. Army, where he served as the Chief Administrative Officer of a U.S. Army Hospital in Louisville, Kentucky, and as the Executive Officer of a U.S. Army Hospital in Baltimore, Maryland. He retired from the U.S. Army after 20 years of active military service to complete a Doctor of Philosophy degree at the

University of Florida in Gainesville, Florida, concentrating his study in higher education administration, university leadership, and ethics.

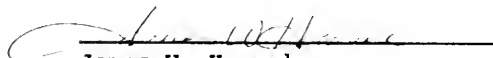
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
James L. Wattenbarger, Chairman  
Distinguished Service Professor of  
Educational Leadership


I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
Joan L. Curcio  
Assistant Professor of Educational  
Leadership

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
James W. Hensel  
Professor of Educational Leadership

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
Michael D. Miller  
Assistant Professor of Foundations of  
Education

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

May, 1991

David B. Smith  
Dean, College of Education

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Dean, Graduate School



